CMF C94 H154 N4 O73

```
-> D IBIB AB HITSTR
L8 ANSWER 1 OF 61 CAPLUS COPYRIGHT 2009 ACS on STN
                         2009:1314 CAPLUS
DOCUMENT NUMBER:
                         150:98660
                         Preparation of targeting conjugates comprising active
                         agents encapsulated in cyclodextrin
                         -containing polymers
INVENTOR(S):
                         Gnaim, Jallal M.; Athamna, Muhammad
PATENT ASSIGNEE(S):
                         Capsutech Ltd., Israel
                         PCT Int. Appl., 60pp.
                         CODEN: PIXXD2
DOCUMENT TYPE:
                         Patent
LANGUAGE:
                         English
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
     PATENT NO.
                         KIND
                                DATE
                                            APPLICATION NO.
                                                                   DATE
     WO 2009001364
                          A2
                                            WO 2008-IL884
         W: AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ,
             CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES,
             FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE,
             KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD,
             ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH,
             PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM,
             TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW
         RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU,
             IE, IS, IT, LT, LU, LV, MC, MT, NL, NO, PL, PT, RO, SE, SI, SK,
             TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD,
             TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW,
             AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
PRIORITY APPLN. INFO .:
                                            US 2007-946775P
                                                              P 20070628
AB The invention provides a targeting conjugate comprising an active agent,
     one or more residues of a cyclodextrin (CD)-containing polymer, and
     a biorecognition mol. The polymer is preferably a peptide or a
     polypeptide comprising at least one amino acid residue containing a functional
     side group to which at least one of the CD residues is linked covalently,
     the biorecognition mol. is covalently bonded directly or via a spacer to
     the polymer backbone of the CD-containing polymer, and the active agent is
     noncovalently encapsulated within the cavity of the cyclodextrin
     residues and/or entrapped within the polymer matrix of
     polymer. Thus, conjugates of di-CD-Glu-PEG3350-FA (FA = folic acid),
     tri-CD-Glu-Glu-PEG3350-FA, and CD-polyGlu-PEG3350-FA encapsulating the
     fluorescent compound rhodamine-B were prepared and tested for their capacity
     to bind to human nasopharyngeal KB cancer cells, which overexpress the
     folate receptor. The data indicate that encapsulating and targeting the
     delivery of an active agent using the conjugates of the invention is far
     more effective compared to non-encapsulated and non-targeted delivery.
     1094725-28-6DP, pegylated, folic acid derivative
     1094725-30-0DP, pegylated, folic acid derivative
            (Pharmacological activity); SPN (Synthetic preparation); THU
     (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
     (Uses)
        (preparation of targeting conjugates comprising active agents encapsulated
        in cyclodextrin-containing polymers)
RN
     1094725-28-6 CAPLUS
     L-Glutamine, N-(6A-deoxy-β-cyclodextrin-6A-yl)-L-glutaminyl-N-(6A-
     deoxy-6-cyclodextrin-6A-yl)-, compd. with
     9-(2-carboxyphenyl)-3,6-bis(diethylamino)xanthylium chloride (1:1:1) (CA
     INDEX NAME)
     CM
     CRN 942936-99-4
```

PAGE 2-A

PAGE 3-A

CM 2

CRN 81-88-9

CMF C28 H31 N2 O3 . C1

• c1=

RN 1094725-30-0 CAPLUS

L-Glutamamide, N-(6A-deoxy-B-cyclodextrin-6A-yl)-L-glutaminyl-N1,N5- $\label{eq:bis(6A-deoxy-} \beta - \text{cyclodextrin-} 6A - \text{yl}) - \text{, compd. with}$

9-(2-carboxyphenyl)-3,6-bis(diethylamino)xanthylium chloride (1:1:1) (CA INDEX NAME)

CM

CRN 1094725-14-0

CMF C136 H223 N5 0106

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM

CRN 81-88-9

CMF C28 H31 N2 O3 . C1

● c1=

942936-99-4 RL: RCT (Reactant); RACT (Reactant or reagent)

(preparation of targeting conjugates comprising active agents encapsulated

RN

PAGE 2-A

PAGE 3-A

T 942936-99-4DP, Jeffamine, and folic acid derivative 1094725-14-0DP, succinic anhydride, Jeffamine, and folic acid

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of targeting conjugates comprising active agents encapsulated

RN

in <u>cyclodextrin</u>-containing polymers)
94236-99-4 CAPLUS
L-Glutamine, N-(6A-deoxy-β-cyclodextrin-6A-yl)-L-glutaminyl-N-(6A-deoxy-β-cyclodextrin-6A-yl)- (CA INDEX NAME)

PAGE 1-A

PAGE 2-A

PAGE 3-A

RN

```
L-Glutamamide, N-(6A-deoxy-B-cyclodextrin-6A-yl)-L-glutaminyl-N1,N5-
     bis(6A-deoxy-B-cyclodextrin-6A-yl)- (CA INDEX NAME)
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
-> D IBIB AB HITSTR 2
L8 ANSWER 2 OF 61 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER:
                         2008:790915 CAPLUS
DOCUMENT NUMBER:
                         Early Stages of Formation of Branched Host-Guest
                         Supramolecular Polymers
AUTHOR(S):
                         Galantini, Luciano; Jover, Aida; Leggio, Claudia;
                         Meijide, Francisco; Pavel, Nicolae Viorel; Soto
                         Tellini, Victor Hugo; Vazquez Tato, Jose; Tortolini,
                         Cristina
CORPORATE SOURCE:
                         Dipartimento di Chimica and Research Center,
                         SOFT-INFM-CNR, Sapienza Universita di Roma, Rome,
                         00185, Italy
                         Journal of Physical Chemistry B (2008), 112(29),
                         CODEN: JPCBFK; ISSN: 1520-6106
PUBLISHER:
                         American Chemical Society
DOCUMENT TYPE:
LANGUAGE:
                         English
    A structural characterization of host-quest supramol. copolymers, formed
     by an adamantane dimer and two \beta- \underline{cyclodextrin} trimers in
     aqueous solution, has been carried out by combining small angle X-ray scattering
     and light scattering expts. A shape-reconstruction method was applied to
     the SAXS data to obtain relatively high-resolution conformation information,
     and a correlation with the exptl. dynamic light scattering results was
     performed, by estimating the hydrodynamic radii of the reconstructed shape
     through a shell model method. When applied on the solns, of the trimers,
     the anal, provides a globular reconstructed shape with a hydrodynamic
     radius in agreement with the exptl. one. For the polymers, elongated
     structures were inferred which grow both in length and in cross section by
     increasing the concentration Depending on the \beta- cyclodextrin
     trimer employed in the polymer preparation, polymerization degrees ranging between
     roughly 7 and 14 or 9 and 22 were obtained in the concentration range 4.00-10.0
     or 3.10-6.60 mM of the trimer (6.00-15.0 or 4.65-9.90 mM of the dimer).
     Aggregation schemes were proposed accounting for the formation of
     hyperbranched, linear, and network like polymers. The exptl. results are
     not far from those expected on the basis of the aggregation in
     hyperbranched structure, for which the growth of elongated aggregates can
     be predicted in the early stages of the polymerization However, the coexistence
     of the other structures, in particular of the linear one, cannot be ruled
     out.
     371161-86-3
             (Properties); RCT (Reactant); RACT (Reactant or reagent)
        (early stages of formation of branched host-guest supramol. polymers)
RN
     371161-86-3 CAPLUS
CN
     B-Cyclodextrin, 6A,6'A,6'A-[nitrilotris[(1-oxo-2,1-
     ethanedryl)imino]]tris[6A-deoxy- (9CI) (CA INDEX NAME)
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
     1041852-10-1P
     RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
        (early stages of formation of branched host-quest supramol. polymers)
     1041852-10-1 CAPLUS
RN
     Glycine, N,N'-1,2-ethanediylbis(N-(2-oxo-2-(tricyclo[3.3.1.13,7]dec-1-
     ylamino)ethyl]-, sodium salt (1:2), polymer with 6A,6'A,6'A-[nitrilotris[(1-oxo-2,1-ethanediyl)imino]]tris[6A-deoxy-β-
     cyclodextrin] (CA INDEX NAME)
     CM 1
     CRN 889126-45-8
     CMF C30 H46 N4 O6 . 2 Na
```

```
2 Na
     CM
     CRN 371161-86-3
     CMF C132 H216 N4 0105
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
                               THERE ARE 42 CITED REFERENCES AVAILABLE FOR THIS
                               RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT
-> D IBIB AB HITSTR 3
L8 ANSWER 3 OF 61 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER:
                         2008:566485 CAPLUS
DOCUMENT NUMBER:
                         Physico-chemical investigation of asymmetrical
                         peptidolipidyl-cyclodextrins
AUTHOR(S):
                         Angelova, Angelina; Fajolles, Christophe; Hocquelet,
                         Celine; Djedaini-Pilard, Florence; Lesieur, Sylviane;
                         Bonnet, Veronique; Perly, Bruno; Lebas, Genevieve;
                         Mauclaire, Laurent
                         CNRS UMR8612 Physico-chimie, Pharmacotechnie,
CORPORATE SOURCE:
                         Biopharmacie, Equipe Physico-chimie des Systemes
                         Polyphases, Universite Paris Sud, Chatenay-Malabry,
                         F-92290, Fr.
SOURCE:
                         Journal of Colloid and Interface Science (2008),
                         CODEN: JCISA5; ISSN: 0021-9797
PUBLISHER:
                         Elsevier
DOCUMENT TYPE:
LANGUAGE:
                         English
AB A new class of amphiphilic peptidolipidyl-cyclodextrins is
     reported. The derivs, are chiral due to the presence of an L-leucine in
     the spacer arm that links a saccharide moiety and a grafted, saturated
     hydrocarbon chain. Self-assembly properties of the peptidolipidyl-
     cyclodextrins are characterized by quasi-elastic light scattering,
     turbidity and UV-visible absorption measurements. NMR expts. give insight
     into the intermol. dipolar interactions as a function of temperature and concentration
     N-dodecyl- N \alpha -(6I-amidosuccinyl-61-deoxy-cyclomaltoheptaose)-L-
     leucine (1) is poorly soluble in aqueous media. N-dodecyl- N \alpha
     -(6I-amidosuccinyl-6I-deoxy-2I,3I-di-0-methyl-hexakis-(2II-VII,3II-VII,6II-
     VII-tri-0-methyl)-cyclomaltoheptaose)-L-leucine (2) is found to be more
     soluble and self-assembles into stable supramol. colloidal aggregates with
     nanometric dimensions above a critical aggregation concentration (CAC). It has a
     propensity for solubilization of hydrophobic species revealing a
     micellar-like behavior, which is compared to that of the non-ionic
     detergent octyl glucoside. On the contrary, compound 1 ppts. in a crystalline
     phase beyond its water solubility limit, and it does not display any
     solubilizing capacity. The observed behavior corroborates at the mol. level
     with the NMR results
     1035018-08-6P 1035018-11-1P
     RL: PEP (Physical, engineering or chemical process); PRP (Properties); SPN
     (Synthetic preparation); PREP (Preparation); PROC (Process)
        (self-assembly and micellar solubilization of amphiphilic
     peptidolipidyl-<u>cyclodextrin</u>)
1035018-08-6 CAPLUS
     \beta-Cyclodextrin, 6A-deoxy-6A-[[4-[[(1S)-1-[(dodecylamino)carbonyl]-3-
```

methylbutyl]amino]-1,4-dioxobutyl]amino]- (CA INDEX NAME)

- RN
- 1035018-11-1 CAPLUS

 \$P-Cyclodextrin, 6A-deoxy-6A-[[4-[[(18)-1-[(dodecylamino)carbony1]-3-methylbuty1]amino]-1,4-d1oxobuty1]amino]-2A, 2B, 2C, 2D, 2E, 2F, 2G, 3A, 3B, 3C, 3D, 3E, 3F, 3G, 6B, 6C, 6D, 6E, 6F, 6G-eicosa-O-methy1- (CA INDEX NARE)

Absolute stereochemistry.

REFERENCE COUNT: 40 THERE ARE 40 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> D IBIB AB HITSTR 4-61

L8 ANSWER 4 OF 61 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2008:232008 CAPLUS

DOCUMENT NUMBER: 148:449892

TITLE: New glycosidic derivatives of histidine-containing dipeptides with antioxidant properties and resistant

to carnosinase activity

AUTHOR(S): Bellia, Francesco; Amorini, Angela Maria; La Mendola, Diego; Vecchio, Graziella; Tavazzi, Barbara; Giardina, Bruno; Di Pietro, Valentina; Lazzarino, Giuseppe;

Bruno; Di Pietro, Valentina; Rizzarelli, Enrico

CORPORATE SOURCE: Department of Chemical Sciences, University of

Catania, Catania, 95125, Italy
SOURCE: European Journal of Medicinal Chemistry (2008), 43(2),

373-380

CODEN: EJMCA5; ISSN: 0223-5234

CODEN: EJMCA5; ISSN
PUBLISHER: Elsevier Masson SAS

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 148:449892

B Synthesis, antioxidant properties and resistance to carnosinase hydrolysis of histidine-containing dipeptides are reported in this study. Carnosine (B-alanyl-L-histidine), homocarnosine

(γ-aminobutyryl-L-histidine) and anserine

 $(\beta \text{-alanyl-3-methyl-L-histidine})$ were covalently derivatized with

 $\beta \underline{\text{cyclodextrin}}$ to form different OH- or NH-bound Mass spectroscopic and 1H NMR data were used to determine the

structure and the purity of the various $\beta-$ <code>cyclodextrim</code> derivs. The inhibitory effect towards <code>oxidation</code> of human LDL induced by Cu2+ ions, was estimated by measuring malondialdehyde formation as a function of increasing concns. of these newly synthesized compds. (the $\beta-$

cyclodextrin-anserine conjugated in 3 had the highest antioxidant effect). All derivs, had higher antioxidant effects than those of the corresponding free histidine-containing dipeptides. Resistance to rat brain carnosinase hydrolysis of the most active derivs, indicated that these compds. are good candidates for further studies in more complex cellular and animal models. Their possible applications for remedies in

neurodegenerative disorders, such as Alzheimer's and Parkinson's diseases, are discussed.

393100-96-4 929220-00-8
RL: BSU (Biological study, unclassified); BIOL (Biological study) (preparation of β - cyclodextrin derivs, of histidine-containing dipeptides and evaluation of their antioxidant properties and their resistance to carnosinase hydrolysis) 393100-96-4 CAPLUS

L-Histidine, N-(6A-deoxy- β -cyclodextrin-6A-yl)- β -alanyl- (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

- 929220-00-8 CAPLUS
- L-Histidine, N-[4-[(6A-deoxy-β-cyclodextrin-6A-y1)amino]-1-oxobuty1]-

(CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

1018683-11-8P

RL: BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(preparation of β-ogoloaktrin derive. of histidine-containing dispetides and evaluation of f their antioxidant properties and their resistance to carnosinase hydrolysis)
1018633-11-8 CAPLUS

RN

L-Histidine, N-(6A-deoxy- β -cyclodextrin-6A-yl)- β -alanyl-3-methyl-CN (CA INDEX NAME)

Absolute stereochemistry.

PAGE 2-A



REFERENCE COUNT: THERE ARE 58 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 5 OF 61 CAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 2008:74777 CAPLUS

DOCUMENT NUMBER: TITLE: 148:396582

Lipid lateral segregation driven by diacyl cyclodextrin interactions at the membrane

surface. [Erratum to document cited in CA147:442329] Roux, Michel; Moutard, Stephane; Perly, Bruno;

AUTHOR(S): Djedaini-Pilard, Florence

Commissariat a l'Energie Atomique/Direction des CORPORATE SOURCE:

Sciences du Vivant/Institut de Biologie et Technologies de Saclay, Service de Bioenergetique, Biologie Structurale et Mecanismes, URA Centre

National de la Recherche Scientifique 2096, Gif-sur-Yvette, F-91191, Fr.

Biophysical Journal (2008), 94(2), 715

CODEN: BIOJAU; ISSN: 0006-3495

PUBLISHER: Biophysical Society DOCUMENT TYPE:

LANGUAGE: English

AB On page 1620, in the sixth line of the Abstract, the volume number in the reference

citation should be "82" not "8". Also, Reference 14 was incorrect; The correct refs. are provided.

IT 850342-08-4 850342-12-0 850342-14-2

RL: BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)

(lipid lateral segregation driven by diacyl cyclodextrin interactions at the membrane surface (Erratum))

850342-08-4 CAPLUS

CN β-Cyclodextrin, 6A-deoxy-6A-[[4-[[(18)-3-(dodecylamino)-1-[(dodecylamino)carbonyl]-3-exepropyl]amino]-1,4-dioxebutyl]amino]- (CA NDEX NAME)

Absolute stereochemistry. Rotation (+).

PAGE 1-A

RN 850342-12-0 CAPLUS

CN B-Cyclodextrin, 6A-deoxy-6A-[[4-[[(18]-3-(dodecylamino)-1-[(dodecylamino)carbonyl]-3-oxopropyl]amino]-1,4-dioxobutyl]amino]-2A,2B,2C,2D,2E,2F,3C,6B,6F,6F,6F,6F-trideca-0-methyl- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

 $850342-14-2 \quad CAPLUS \\ \beta-Cyclodextrin, \quad 6A-deoxy-6A-[[4-[[(18)-3-(dodecylamino)-1-[(dodecylamino) arbonyl]-3-oxopropyl]amino]-1, 4-dioxobutyl]amino]-2A, ZB, C2, ZD, ZE, ZF, ZG, SA, 3B, 3C, 3D, 3E, 3F, 3G, 6B, 6C, 6D, 6E, 6F, 6G-elcosa-Omethyl-(CA INDEX NAME).$

Absolute stereochemistry. Rotation (+).

```
18 ANSWER 6 OF 61 CAPLUS COPYRIGHT 2009 ACS on STN
```

ACCESSION NUMBER: 2007:965747 CAPLUS

DOCUMENT NUMBER:

Cerium complexes of <u>cyclodextrin</u> dimers as efficient catalysts for luminol chemiluminescence

reactions

Yuan, De-Qi; Lu, Jianzhong; Atsumi, Masato; Yan,

AUTHOR(S): Jia-Ming; Kai, Masaaki; Fujita, Kahee

Department of Molecular Medicinal Sciences, Graduate

School of Biomedical Sciences, Nagasaki University,

Nagasaki, 852-8521, Japan Organic & Biomolecular Chemistry (2007), 5(18),

SOURCE: 2932-2939

CODEN: OBCRAK; ISSN: 1477-0520

PUBLISHER: Royal Society of Chemistry DOCUMENT TYPE: Journal

English LANGUAGE:

CORPORATE SOURCE:

OTHER SOURCE(S): CASREACT 147:486611

The chemiluminescence of a luminol-H2O2 system is found to be remarkably

enhanced by the CeIV complexes of EDTA-bridged cyclodextrin dimers. The dimers were proved to work much more efficiently than the corresponding monomer. The cavity shape of cyclodextrin

moretres and their cooperation displayed an important role in amplifying the chemiluminescence. Further modification of either the

cyclodextrin rims or the EDTA linker altered significantly the

catalytic abilities of the cyclodextrin dimers, and the examination

of the effect of substituents on the chemiluminescence outputs suggested that the proximity between the <u>owplodextrin</u> cavity and the metallic center might account for the amelioration of the chemiluminescence output.

954378-21-3D, cerium complexes
RL: FRP (Properties)
(preparation of <u>cyclodextrin</u> dimer cerium complexes for use as

catalysts in luminol chemiluminoscence reactions)
RN 43202-87-5 (APL)
CN B-Cyclodextrin, 6A,6'A-[1,2-ethanodiylbis[[(carboxymethyl)imino][1-cxo-2,1-ethanodiyl]imino][bis[6A-deoxy- (CA INDEX NAME)

PAGE 1-A

PAGE 2-A

PAGE 3-A

$$\begin{array}{c} & & & & & \\ & & & & \\ & & & \\ & & & \\ \text{CH}_2 - \text{NH} - \text{C} - \text{CH}_2 - \text{N} - \text{CH}_2 - \text{CH}_2 - \text{N} - \text{CH}_2 - \text{C} - \text{O} \\ \\ \text{RZ} & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & &$$

- 954378-13-3 CAPLUS ${\rm RN}$
- Section 2013 Artible Projection of the Artib

Absolute stereochemistry.

PAGE 1-A



RN CN

954378-16-6 CAPLUS \$\$\beta-Cyclodextrin, \$6A,6'A-[1,2-ethanediylbis[[[2-[[2-(1H-imidazol-4-yl] ethyl]amino]-2-excethyl]imino](1-exc-2,1-ethanediyl)imino]]bis[6A-deoxy-(CA INDEX NAME)

PAGE 1-A

PAGE 2-A

- * STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY AVAILABLE VIA OFFLINE PRINT * RN 954378-17-7 CAPLUS
- Now in the control of the control of

PAGE 1-A

PAGE 2-A

PAGE 3-A

- RN 954378-20-2 CAPLUS
- CN β-Cyclodextrin, 6A,6'A-[1,2-ethanediylbis[[(carboxymethyl)imino](1-oxo-2,1-ethanediyl)imino]]bis[6A,6B-dideoxy-6B-(1H-imidazol-1-yl)-(CA INDEX NAME)
- *** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
- RN 954378-21-3 CAPLUS
- CN β-Cyclodextrin, 6A,6'A-[1,2-ethanediylbis[[[2-oxo-2-[(2-yyridinylmethyl]amino]ethyl]imino][(1-oxo-2,1-ethanediyl)imino]]bis[6A,6B-didoxy-6B-([H-imidazol-1-yl-])- (CA INDEX NAME)]

PAGE 2-A

HO-CH2

PAGE 3-A

PAGE 3-B

PAGE 4-A

432023-87-5
RL: PRP (Properties); RCT (Reactant); RACT (Reactant or reagent) (preparation of <u>cyclodextri</u> dimer cerlum complexes for use as datalysts in luminol chemiluminescence reactions) 432023-87-5 CAPLUS

B-Cyclodextrin, 6A,6'A-[1,2-ethanediylbis[[(carboxymethyl)imino](1-oxo-2,1-ethanediyl)imino]]bis[6A-deoxy- (CA INDEX NAME) CN

PAGE 1-A

PAGE 2-A

432023-89-7P 954378-13-3P 954378-16-6P

954378-17-7P 954378-21-3P

- RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation) (preparation of cyclodextrin dimer cerium complexes for use as catalysts in luminol chemiluminescence reactions)
 432023-89-7 CAPLUS
- RN
- CN $\beta - \texttt{Cyclodextrin, 6A,6'A-[1,2-ethanediylbis[[(carboxymethyl)imino](1-dexequation))} = \beta - \texttt{Cyclodextrin,$ oxo-2,1-ethanediyl)imino]]bis[6A-deoxy-2A, 2B, 2C, 2D, 2E, 2F, 2G, 3A, 3B, 3C, 3D, 3E, 3F, 3G, 6B, 6C, 6D, 6E, 6F, 6G-eicosa-0methyl- (CA INDEX NAME)
- *** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
- RN 954378-13-3 CAPLUS
- β-Cyclodextrin, 6A,6'A-[1,2-ethanediylbis[[[2-oxo-2-[(2
 - pyridinylmethyl)amino]ethyl]imino](1-oxo-2,1-ethanediyl)imino]]bis[6Adeoxy- (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

RN CN

954378-16-6 CAPLUS β -Cyclodextrin, 6A,6'A-[1,2-ethanediylbis[[[2-[[2-(1B-imidazol-4-yl]ethyl]amino]-2-oxoethyl]imino](1-oxo-2,1-ethanediyl)imino]]bis[6A-deoxy-(CA INDEX NAME)

PAGE 2-A

^{*} STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

⁹⁵⁴³⁷⁸⁻¹⁷⁻⁷ CAPLUS

CN

N-Cyclodextrin, 6A,6'A-[1,2-ethanediylbis[[[2-oxo-2-[(pbenylmethyl]amino|ethyl]imino](1-oxo-2,1-ethanediyl)imino]]bis[6A-deoxy-(GA INDEX NAME)

R2—СН2—ОН

PAGE 3-A

PAGE 2-A

PAGE 1-A

PAGE 2-A

PAGE 3-A

PAGE 3-B

PAGE 4-A

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of cyclodextrin dimer cerium complexes for use as

catalysts in luminol chemiluminescence reactions)

954378-20-2 CAPLUS

β-Cyclodextrin, 6A,6'A-[1,2-ethanediylbis[[(carboxymethyl)imino](1oxo-2, 1-ethanediyl) imino]]bis[6A, 6B-dideoxy-6B-(1H-imidazol-1-yl)- (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

REFERENCE COUNT: 60 THERE ARE 60 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 7 OF 61 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2007:946118 CAPLUS

DOCUMENT NUMBER:

Lipid lateral segregation driven by diacyl cyclodextrin interactions at the membrane

AUTHOR(S):

Roux, Michael; Moutard, Staphane; Perly, Bruno; Djedaini-Pilard, Florence Commissariat a l Energie Atomique/Direction des

CORPORATE SOURCE:

Sciences du Vivant/Institut de Biologie et

Technologies de Saclay, Service de Bioenergetique, Biologie Structurale et Mecanismes, URA Centre National de la Recherche Scientifique 2096, Gif sur

Yvette, F-91191, Fr. Biophysical Journal (2007), 93(5), 1620-1629

SOURCE: CODEN: BIOJAU; ISSN: 0006-3495

PUBLISHER: Biophysical Society

DOCUMENT TYPE: LANGUAGE: English

AΒ Cyclodextrins are hydrophilic mol. cages with a hydrophobic

interior allowing the inclusion of water-insol, drugs. Amphiphilic cyclodextrins obtained by appending a hydrophobic anchor were

to improve the cell targeting of the drug-containing cavities through their liposome transportation in the organism. After insertion in model membranes, they were found to induce a lateral phase separation into a pure

lipid phase and a fluid cyclodextrin-rich phase (LCD) with reduced acyl chain order parameters, as observed with a derivative containing a

cholesterol anchor. We present another class of amphiphilic cyclodextrins obtained by grafting aspartic acid esterified by two

laurly chains on the oligosaccharide core via a succinyl spacer. The

obtained dilauryl-β- cyclodextrin (βDLC) was inserted in chain perdeuterated dimyristoylphosphatidylcholine (DMPC-d54) membranes and studied by deuterium NMR (2H-NMR). A laterally segregated mixed phase was found to sequester three times more lipids than the cholesteryl derivative (.apprx.4-5 lipids per monomer of βDLC), and a quasipure LCD phase

could be obtained with a 20% molar concentration of β DLC. When cooled below the main fluid-to-gel transition of DMPC-d54 the BDLC-rich phase stays fluid, coexisting with pure lipid in the gel state, and exhibits a

sharp transition to a gel phase with frozen DMPC acyl chains at 12.5°. No lateral phase separation was observed with partially or fully methylated βDLC, confirming that the stability of the segregated LCD

phase was governed through hydrogen-bond-mediated intermol. interactions between cyclodextrin headgroups at the membrane surface. As opposed to native βDLC, the methylated derivs. were found to strongly

increase the orientational order of DMPC acyl chains as the temperature reaches the membrane fluid-to-gel transition. The results are discussed in relation to the "anomalous swelling" of saturated phosphatidylcholine multilamellar membranes known to occur in the vicinity of the main fluid-to-gel transition.

850342-08-4 850342-12-0 850342-14-2

RL: BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)

(lipid lateral segregation driven by diacyl cyclodextrin

interactions at the membrane surface) 850342-08-4 CAPLUS

 $\begin{array}{lll} \beta\text{-Cyclodextrin, } 6A\text{-deoxy-}6A\text{-[[4-[[(1S)-3-(dodecylamino)-1-[(dodecylamino) carbonyl]-3-oxopropyl]amino]-1,4-dioxobutyl]amino]- (CA) \\ \end{array}$ INDEX NAME)

Absolute stereochemistry. Rotation (+).

PAGE 1-A

PAGE 2-A

850342-12-0 CAPLUS

CN β-Cyclodextrin, 6A-deoxy-6A-[[4-[[(1S)-3-(dodecylamino)-1-

[(dodecylamino)carbonyl]-3-oxopropyl]amino]-1,4-dioxobutyl]amino]-2A,2B,2C,2D,2E,2F,2G,6B,6C,6D,6E,6F,6G-trideca-O-methyl- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

- $850342-14-2 \quad CAPLUS \\ \beta-Cyclodextrin, \quad 6A-deoxy-6A-[[4-[[(18)-3-(dodecylamino)-1-[(dodecylamino) arbonyl]-3-oxopropyl]amino]-1, 4-dioxobutyl]amino]-2A, ZB, C2, ZD, ZE, ZF, ZG, SA, 3B, 3C, 3D, 3E, 3F, 3G, 6B, 6C, 6D, 6E, 6F, 6G-elcosa-Omethyl-(CA INDEX NAME).$

Absolute stereochemistry. Rotation (+).

$$\begin{array}{c} \text{Me} & \text{(CH2)} \\ \text{Me} & \text{(CH2)} \\ \text{(CH2)} \\ \text{11} & \text{S} \\ \text{M} \\ \end{array}$$

REFERENCE COUNT: THERE ARE 44 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

18 ANSWER 8 OF 61 CAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 2007:706195 CAPLUS

DOCUMENT NUMBER: TITLE: 147:118498

Preparation of cyclodextrin-containing

polymers, especially **cyclodextrin**-containing amino acid derivatives and peptides, and their uses for controlled release of bioactive molecules encapsulated within them

INVENTOR(S): Gnaim, Jallal M. PATENT ASSIGNEE(S): Capsutech Ltd., Israel SOURCE: PCT Int. Appl., 65pp.

CODEN: PIXXD2 DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO.					KIN	D	DATE		APPLICATION NO.					DATE			
	WO 2007072481				A2		20070628		WO 2006-IL1459					20061219			
WO	2007 W:	AE, GN,	AG, GO,	GR,	GU,	AT,	AU, DE, HR,	AZ, DK,	DM,	DZ,	EG.	EE,	EG,	ES,	FI,	GB.	GD,

```
KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK,
             MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO,
             RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT,
             TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW
        RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
             IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ,
            CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH,
             GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
             KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA
     AU 2006327551
                         A1
                              20070628
                                         AU 2006-327551
                                                                  20061219
     CA 2633801
                         A1
                                           CA 2006-2633801
                                                                  20061219
    EP 1976546
                         A2
                               20081008
                                           EP 2006-832256
         R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
             IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, AL,
             BA, HR, MK, RS
     US 20080275139
                         A1
                               20081106
                                           US 2008-158091
     IN 2008CN03486
                         A
                                           IN 2008-CN3486
PRIORITY APPLN. INFO.:
                                           US 2005-751295P
                                                               P 20051219
                                                               P 20061025
                                           US 2006-854074P
                                            WO 2006-IL1459
                                                               W 20061219
OTHER SOURCE(S):
                        CASREACT 147:118498
AB The invention provides a cyclodextrin-containing polymer comprising
     one or more cyclodextrin residues, wherein the polymer is
     selected from a peptide, a polypeptide, an oligonucleotide or a
     polynucleotide or a mixture thereof, wherein the peptide or polypeptide has
     at least one amino acid residue containing a functional side group and at
     least one of the cyclodextrin residues is covalently linked to
     the functional side group of the amino acid residue of the peptide or
     polypeptide or to the sugar moiety of a nucleotide residue of the
     oligonucleotide or polynucleotide. The invention relates to compns. for
     controlled release of water-insol. or unstable drugs, odor and color
     agents encapsulated and/or entrapped within the cyclodextrin
     -containing polymer. Thus, homopolypeptide
     poly(mono-6-deoxy-6-(4-carboxy-4-aminobutyrylamino)-β-
     cyclodextrin) was prepared in 3 steps by coupling
     mono-6-deoxy-6-amino-β- cyclodextrin with
     Boc-NH-Glu(CO2H)-COOBz (Boc = tert-butoxycarbonyl, Bz = benzyl); cleavage
     of the Boc group, cleavage of the Bz group, and coupling of
     mono-6-deoxy-6-(4-carboxy-4-aminobutyrylamino)-β- cyclodextrin
     using DCC and HOBT in DMF. A general procedure for the encapsulation of
     thymol and vitamin E by a cyclodextrin-containing a dipeptide is
     given.
     942936-98-3P 942936-99-4P
     RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
     (Reactant or reagent)
        (preparation of cyclodextrin-containing amino acid derivs. and
        peptides and their uses for controlled release of bioactive mols.
```

encapsulated within them)

942936-98-3 CAPLUS L-Glutamine, N-(6A-deoxy- β -cyclodextrin-6A-y1)-N2-[(1,1-

dimethylethoxy)carbonyl]-L-glutaminyl-N-(6A-deoxy-B-cyclodextrin-6Ayl) -, phenylmethyl ester (CA INDEX NAME)

PAGE 2-A

PAGE 3-A

PAGE 2-A

PAGE 3-A

94236-96-1P 94236-97-2P
KI. SW (Synthetic preparation); PREP (Preparation)
(preparation of gyclodetrin-containing amino acid derivs. and
peptides and their uses for controlled release of bioactive mols.
encapsulated within them)
94236-96-1 CAPLUS

- $\beta\text{-Cyclodextrin, }6A,6"A-[[(28)-2-[[(1,1-dimethylethoxy)\,carbonyl]amino]-1,5-dioxo-1,5-pentanediyl]bis(imino-2,1-ethanediyllmino)]bis(6A-deoxy-(CA INDEX NAME))$ CN
- *** STRUCTURE DIAGRAM IS NOT AVAILABLE *** RN 942936-97-2 CAPLUS
- RN
- CN
- B-Cyclodextrin, 6A,6'A-[[(28)-2-amino-1,5-dioxo-1,5-pentanediyl]bis(imino-2,1-ethanediylimino)]bis[6A-deoxy- (CA INDEX NAME)

PAGE 1-A

PAGE 2-A

942937-00-0P 942937-01-1P
RI: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PERE (Preparation); USES (Uses)

(use of <u>cyclodextrin</u>-peptides for controlled release of bioactive mols. encasulated within them) 942937-00-0 CAPLUS

 $\label{eq:local_problem} $$ -6.00 \times -\beta - cyclodextrin-6A-yl)-L-glutaminyl-N-(6A-decxy-\beta-cyclodextrin-6A-yl)-, compd. with $$ -6.00 \times -\beta - cyclodextrin-6A-yl)-, compd. with $$ -6.00 \times -\beta - cyclodextrin-6A-yl)-, compd. with $$ -6.00 \times -\beta - cyclodextrin-6A-yl)-L-glutaminyl-N-(6A-decxy-\beta-cyclodextrin-6A-yl)-L-glutaminyl-N-(6A-decxy-b-cyclodextrin-6A-yl)-L-glutaminyl-N-(6A-decxy-b-cyclodextrin-6A-yl)-L-glutaminyl-N-(6A-decxy-b-cyclodextrin-6A-yl)-L-glutaminyl-N-(6A-decxy-b-cyclodextrin-6A-yl)-L-glutaminyl-N-(6A-decxy-b-cyclodextrin-6A-yl)-L-glutaminyl-N-(6A-decxy-b-cyclodextrin-6A-yl)-L-glutaminyl-N-(6A-decxy-b-cyclodextrin-6A-yl)-L-glutaminyl-N-(6A-decxy-b-cyclodextrin-6A-yl)-L-glutaminyl-N-(6A-decxy-b-cyclodextrin-6A-yl)-L-glutaminyl-N-(6A-decxy-b-cyclodextrin-6A-yl)-L-glutaminyl-N-(6A-decxy-b-cyclodextrin-6A-yl)-L-glutaminyl-N-(6A-decxy-b-cyclodextrin-6A-yl)-L-glutaminyl-N-(6A-decxy-b-cyclodextrin-6A-yl)-L-glutaminyl-N-(6A-decxy-b-cyclodextrin-6A-yl)-$

CRN 942936-99-4

CMF C94 H154 N4 O73

PAGE 1-A

PAGE 2-A

PAGE 3-A

CM 2

CRN 89-83-8 CMF C10 H14 0

942937-01-1 CAPLUS L-Glutamine, N-(6A-deoxy)- β -cyclodextrin-6A-yl)-L-glutaminyl-N-(6A-deoxy)- β -cyclodextrin-6A-yl)-, compd. with vitamin E (1:?) (CA INDEX CN NAME)

CM

CRN 942936-99-4 CMF C94 H154 N4 O73

PAGE 1-A

PAGE 2-A

```
PAGE 3-A
                                     CO2H
       CH2-NH-C-CH2-CH-NH-C
                                               -CH-CH2-CH2
                                                              CH<sub>2</sub>
     CRN 1406-18-4
     CMF Unspecified CCI MAN
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
L8 ANSWER 9 OF 61 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER:
                            2007:652009 CAPLUS
DOCUMENT NUMBER:
                            Synthesis and antioxidant activity of new
                            homocarnosine β- cyclodextrin conjugates
                            Amorini, Angela Maria; Bellia, Francesco; Di Pietro,
AUTHOR(S):
                            Valentina; Giardina, Bruno; La Mendola, Diego;
                            Lazzarino, Giuseppe; Sortino, Salvatore; Tavazzi,
                            Barbara; Rizzarelli, Enrico; Vecchio, Graziella
CORPORATE SOURCE:
                            Dipartimento di Scienze Chimiche, Universita di
                            Catania, Catania, 95125, Italy
                            European Journal of Medicinal Chemistry (2007), 42(7),
SOURCE:
                            CODEN: EJMCA5; ISSN: 0223-5234
PUBLISHER:
                            Elsevier Masson SAS
DOCUMENT TYPE:
LANGUAGE:
                            English
OTHER SOURCE(S):
                            CASREACT 147:258022
AB Several in vitro and in vivo studies have suggested that carnosine,
     H2N(CH2)2CO-His-OH, and homocarnosine, H2N(CH2)3CO-His-OH, can act as
     scavengers of reactive oxygen species. \beta- Cyclodextrin was
     functionalized with homocarnosine, obtaining the following new
     bioconjugate isomers: 6A-[(4-{[(1S)-1-carboxy-2-(1H-imidazol-4-
     yl) ethyl] amino}-4-oxobutyl) amino]-6A-deoxy-β- cyclodextrin
     and (2AS, 3AR) -3A-[(4-{[(1S)-1-carboxy-2-(1H-imidazol-4-yl)ethyl]amino}-4-
     oxobutyl)amino]-3A-deoxy-β- cyclodextrin. Pulse radiolysis
     investigations show that the \beta- <code>cyclodextrin</code> homocarnosine bioconjugates are scavengers of hydroxyl radicals because of the formation
     of stable imidazole-centered radicals and the scavenger ability of glucose
     mols. of the macrocycle. The ability of these new \beta-
     cyclodextrin derivs. to inhibit the copper(II)-driven LDL oxidation
     was determined in comparison with that displayed by the analogous carnosine
     derivs. Both \beta- <u>cyclodextrin</u> carnosine isomers show a
     higher protective effect than that of free dipeptide and homocarnosine derivs., bringing into light the role of the \beta-CD cavity.
     393100-96-4
     RL: PAC (Pharmacological activity); BIOL (Biological study)
(biol. activity as inhibitors of Cu(II)-driven LDL oxidation)
     393100-96-4 CAPLUS
```

L-Histidine, N-(6A-deoxy- β -cyclodextrin-6A-yl)- β -alanyl- (CA

INDEX NAME)
Absolute stereochemistry.

PAGE 1-A

929220-00-8P
Ri: PAC (Pharmacological activity); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation) (Biological study); PREP (Preparation) (preparation of homocaronomies Power of hydroxyl conjugates, and their biol. activity as accompany of hydroxyl radicals and as

RN

inhibitors of Cu(II)-driven LDL oxidation)
929220-00-8 CAPUS
L-Histidine, N-[4-[(6A-deoxy-β-cyclodextrin-6A-yl)amino]-1-oxobutyl](CA INDEX NAME)

Absolute stereochemistry.

REFERENCE COUNT: THERE ARE 54 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 10 OF 61 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2007:441340 CAPLUS

DOCUMENT NUMBER:

AUTHOR(S):

A synthetic supramolecular construct modulating

protein assembly in cells

Zhang, Li; Wu, Yaowen; Brunsveld, Luc

CORPORATE SOURCE: Max-Planck-Inst. Mol. Physiol., Dortmund, 44227, Germany

SOURCE: Angewandte Chemie, International Edition (2007),

46(11), 1798-1802

CODEN: ACIEF5; ISSN: 1433-7851

PUBLISHER: Wiley-VCH Verlag GmbH & Co. KGaA DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 147:66253

Supramol, chemical in the cell: Synthetic supramol, constructs ligated to proteins modulate protein assembly. The interaction between the supramol. elements is operative both in vitro and in cells, and drives the proteins to assemble, as revealed by a strong FRET effect between the engineered profeins.

941690-44-4DP, conjugated with enhanced yellow fluorescent protein RL: BSU (Biological study, unclassified); PRP (Properties); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(synthetic supramol, construct modulating protein assembly in cells) 941690--44--4 CAPLUS

β-Cyclodextrin, 6A-[[2-[[(2R)-2-amino-3-mercapto-1oxopropyl]amino]ethyl]amino]-6A-deoxy- (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

941690-43-3P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(synthetic supramol. construct modulating protein assembly in cells) 941690-43-3 CAPLUS RN

CN β -Cyclodextrin, 6A-deoxy-6A-[[2-[[(2R)-2-[[(1,1-

dimethylethoxy)carbonyl]amino]-1-oxo-3[(triphenylmethyl)thio]propyl]amino]ethyl]amino]- (CA INDEX NAME)

Absolute stereochemistry.

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 11 OF 61 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2007:369558 CAPLUS

DOCUMENT NUMBER: 148:379825

Oligosaccharide tagged $\beta-$ <code>cyclodextrins:</code> synthesis and biological affinity towards Concanavalin

Smiljanic, Nicolas; Moreau, Vincent; Yockot, Duplex;

AUTHOR(S): Garcia Fernandez, Jose Manuel; Djedaini-Pilard,

Florence CORPORATE SOURCE:

Laboratoire des Glucides UMR 6219, Universite de

Picardie Jules Verne, Amiens, 80039, Fr.

Journal of Inclusion Phenomena and Macrocyclic Chemistry (2007), 57(1-4), 9-14SOURCE:

CODEN: JIPCF5; ISSN: 1388-3127

PUBLISHER: Springer

DOCUMENT TYPE: Journal LANGUAGE:

AΒ An original synthetic route based on multi-glycosylation and selective protection-deprotection steps has been developed which allows a fast

access to complex oligo-mannosides with both α -(1,3), α -(1,6) and $\alpha-(1,3),\alpha-(1,4)$ cores. The later have been linked to modified $\beta \underline{cyclodextrins}$ bearing spacing arms of varying chemical structure and length through peptidic-like coupling, leading to the

formation of a range of oligo-mannosyl **cyclodextrin** conjugates. Complexation studies with sodium anthraquinone-2-sulfonate (ASANa) and sodium adamantane 1-carboxylate (ACNa) as quest mols, demonstrated that the $\beta \underline{cyclodextrin}$ inclusion properties are preserved.

Binding affinity studies using the mannose specific lectin Con A demonstrated the key role of the d. and tridimensional structure of the sugar ligand in recognition events.

1013938-44-7D, Con A bound BSU (Biological study, unclassified); FMU (Formation, unclassified); PEP (Physical, engineering or chemical process); BIOL (Biological study); FORM (Formation, nonpreparative); PROC (Process)

(oligosaccharide tagged $\beta-$ <code>cyclodextrins</code> and synthesis and biol. affinity towards Con A) 1013938-44-7 CAPLUS

B-Cyclodextrin, 6A-deoxy-6A-[[4-[(4-[(0-α-D-mannopyranosyl- $(1\rightarrow 3)$ -0- $[\alpha$ -D-mannopyranosyl- $(1\rightarrow 4)$]- β -D-

mannopyranosyl) amino] $-1-[[(O-\alpha-D-mannopyranosyl-(1\rightarrow3)-O-mannopyr$ $[\alpha\text{-D-mannopyranosyl-(1-4)]-}\beta\text{-D-}$

mannopyranosyl)amino]carbonyl]-4-oxobutyl]amino]-1,4-dioxobutyl]amino]-(CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

1013938-45-8 1013938-52-7

RL: FMU (Formation, unclassified); PEP (Physical, engineering or chemical process); FORM (Formation, nonpreparative); PROC (Process) (oligosaccharide tagged $\beta \underline{cyclodextrins}$ and synthesis and biol, affinity towards $\overline{\text{Con }A)}$

1013938-45-8 CAPLUS RN

 β -Cyclodextrin, 6A-deoxy-6A-[[4-[[4-[(0- α -D-mannopyranosyl-

 $\begin{array}{l} (1\to3)-0-[\alpha-D-mannopyranosyl-(1\to4)]-\beta-D-\\ mannopyranosyl)\ amino]-1-[\ [\ (0-\alpha-D-mannopyranosyl-(1\to3)-0-1)] \end{array}$

 $[\alpha-D-mannopyranosyl-(1\rightarrow4)]-\beta-D-$

mannopyranosyl)amino|carbonyl]-4-oxobutyl]amino|-1,4-dioxobutyl]amino|-, compd. with sodium tricyclo[3.3.1.13,7]decane-1-carboxylate (1:1:1) (CA INDEX NAME)

CM

CRN 1013938-44-7 CMF C87 H144 N4 O68

Absolute stereochemistry.

PAGE 1-A

CM 2

CRN 40242-32-8 CMF C11 H16 O2 . Na

RN 1013938-52-7 CAPLUS

β-Cyclodextrin, 6A-deoxy-6A-[[4-[[4-[(0-α-D-mannopyranosyl-(1+3)=0-[α -D-mannopyranosyl=(1+4)]= β -D-mannopyranosyl)amino]=1-[[(0- α -D-mannopyranosyl-(1+4)]= β -D-[α -D-mannopyranosyl-(1+4)]= β -D-

mannopyranosyl)amino]carbonyl]-4-oxobutyl]amino]-1,4-dioxobutyl]amino]-, compd. with sodium 9,10-dihydro-9,10-dioxo-2-anthracenesulfonate (1:1:1) (CA INDEX NAME)

CRN 1013938-44-7 CMF C87 H144 N4 O68

Absolute stereochemistry.

PAGE 1-A

CM 2

CRN 131-08-8 CMF C14 H8 O5 S . Na

REFERENCE COUNT:

CORPORATE SOURCE:

THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS 14 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

18 ANSWER 12 OF 61 CAPLUS COPYRIGHT 2009 ACS on STN 2007:360774 CAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER:

Efficient Use of Ellman Safety-Catch Linker for

Solid-Phase Assisted Synthesis of Multivalent

Glycoconjugates

Diaz-Moscoso, Alejandro; Benito, Juan M.; Mellet, AUTHOR(S): Carmen Ortiz; Fernandez, Jose M. Garcia

Instituto de Investigaciones Quimicas, CSIC, Seville,

E-41092, Spain

SOURCE: Journal of Combinatorial Chemistry (2007), 9(3), 339-342

CODEN: JCCHFF; ISSN: 1520-4766 American Chemical Society

PUBLISHER: DOCUMENT TYPE:

LANGUAGE: English

OTHER SOURCE(S): CASREACT 147:10107

A strategy that ensures high-yielding release of the glyco-ligands from the resin solid support in mild and chemoselective conditions, minimizing purification steps of the final adducts, taking advantage of the Ellman safety-catch linker principle, is reported. Furthermore, the resin-bound compds. can be released under very mild conditions using a two-step strategy involving (i) selective N-alkylation of the N-acyl-sulfonamide group and (ii) attack of a mild nucleophile, for instance an amine, to the N-alkyl- N-acyl-sulfonamide intermediate.

937255-66-8P RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(use of Ellman safety-catch linker for solid-phase assisted synthesis

of multivalent glycoconjugate dendrimers)
RN 937255-66-8 CAPLUS

CN β -Cyclodextrin, 6A-[[N,N-bis[2-[[[[2-(α -D-mannopyranosyloxy)-

1, 1-bis[(α -D-mannopyranosyloxy)methyl]ethyl]amino]carbonyl]amino]ethyl]glycylglycyl]amino]-6A-deoxy- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

PAGE 1-A

PAGE 3-A

T 937255-64-6P

RL: SPN (Synthetic preparation); PREP (Preparation)
(use of Ellman safety-catch linker for solid-phase assisted synthesis
of multivalent qlycoconjugate dendrimers)

RN 937255-64-6 CAPLUS

3/3/205-04-0 User/ub |
a-D-Gluopyranoside, methyl 6-[[N,N-bis[2-[[[2-(2,3,4,6-tetra-0-acetyl-α-D-mannopyranosyl) oxy]-1,1-bis[[(2,3,4,6-tetra-0-acetyl-α-D-mannopyranosyl) oxy]methyl]ethyl]amino]carbonyl]amino]ethyl]glycy |
a[y-cyl]amino]-6-decy- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

PAGE 2-A

THERE ARE 57 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 13 OF 61 CAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 2007:71794 CAPLUS

DOCUMENT NUMBER: 146:349958

Copper(II) complexes with $\beta-$ cyclodextrin -homocarnosine conjugates and their antioxidant

AUTHOR(S): Bellia, Francesco; La Mendola, Diego; Maccarrone,

Giuseppe; Mineo, Placido; Vitalini, Daniele; Scamporrino, Emilio; Sortino, Salvatore; Vecchio,

Graziella; Rizzarelli, Enrico CORPORATE SOURCE: Dipartimento di Scienze Chimiche, Universita di

Catania, Catania, 6, CT 95125, Italy SOURCE: Inorganica Chimica Acta (2007), 360(3), 945-954

CODEN: ICHAA3; ISSN: 0020-1693

PUBLISHER: Elsevier B.V. DOCUMENT TYPE: Journal

LANGUAGE: English

Cu(II) complexes of the $\beta \underline{cyclodextrin}$ $(\beta\text{-CD})$ functionalized with homocarnosine (Hc) in the primary (CDHC6) and secondary rim (CDHC3) were characterized by different spectroscopic techniques such as UV-visible absorption, CD, ESR and electron-spray mass spectrometry. Taken together, all the spectroscopic parameters indicate the formation of different Cu(II) complex species at various pH values. In the CDHC3 Cu(II) complex species, a direct involvement of the secondary hydroxyl Group 2 of functionalized β -CD's ring was pointed out. The antioxidant activity of the Cu(II) complexes of the two derivs. was determined through pulse radiolysis measurements. The results obtained provide direct evidence for a high catalytic activity of both complexes towards the dismutation of the superoxide anion radical. Also the complex formation is not detrimental to the excellent scavenger activity exhibited

by the ligands alone towards hydroxyl radicals. These Cu complexes then represent very intriguing antioxidant agents against known toxic reactive O species.

929220-00-8DP, copper complex

RL: CAT (Catalyst use); SPN (Synthetic preparation); PREP (Preparation); USES (Uses)

(preparation, antioxidant and hydroxyl radical scavenging activity of copper complexes with homographs derivs. of β- <u>cyclodextrin</u>) 30 929220-00-8 CAPLUS

NN 523220-00-6 CAPINOS EMISTÍGIA, N-[4-[(6A-deoxy-β-cyclodextrin-6A-y1)amino]-1-oxobutyl]-(CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

REFERENCE COUNT: 45 THERE ARE 45 CITED REFERENCES AVAILABLE FOR THIS RECORD, ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 14 OF 61 CAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 2006:904991 CAPLUS

DOCUMENT NUMBER: 145:433575
TITLE: Supramolecular control of oligosacchari

MITLE: Supramolecular control of oligosaccharide-protein interactions: switchable and tunable ligands for

concanavalin A based on β- gyclodextrin
AUTHOR(S): Smiljanio, Nicolas; Moreau, Vincent; Yockot, Duplex; Benito, Juan M.; Garcia Pernandez, Jose M.;

Djedaini-Pilard, Florence
CORPORATE SOURCE: Laboratoire des Glucides UMR6219, Universite Picardie

Jules Verne, Amiens, 80039, Fr. Angewandte Chemie, International Edition (2006),

CODEN: ACIEF5; ISSN: 1433-7851

Wiley-VCH Verlag GmbH & Co. KGaA

DOCUMENT TYPE:

LANGUAGE: English

CASREACT 145:433575 OTHER SOURCE(S):

The ins and outs of binding: Supramol. control of carbohydrate-protein

interactions has been achieved through the design of β cyclodextrin (βCD) based conjugates whose conformation is

dependent on a reversible self-inclusion process. The accessibility of inclusion of effector/antagonist-like mols. in the βCD cavity.

639464-25-8P 912654-92-3P

RL: BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(switchable and tunable ligands for Con A based on $\beta-$

cyclodextrin)
639464-25-8 CAPLUS

 $\beta - \texttt{Cyclodextrin, 6A-deoxy-6A-[[4-[[(1S)-1-[(4-hydroxyphenyl)methyl]-2-[(4-hydroxy$ [(0- α -D-mannopyranosyl-(1-3)-0-[α -D-mannopyranosyl-

 $(1\rightarrow6)$]- β -D-mannopyranosyl)amino]-2-oxoethyl]amino]-1,4-dioxobutyl]amino]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

PAGE 3-A

- RN
- 912654-92-3 CAPLUS L-Glutamantide, $N=[4-(6A-deoxy-\beta-oyolodextrin-6A-y1)amino]-1,4-(abxobuty1]-1-tyrosy1-31,NS-bis[0-<math>\alpha$ -0-mannopyranosy1-(1-3)-0-[α -0-mannopyranosy1-(1-3)-0-(CA-INDEX-NAME)]

Absolute stereochemistry.

PAGE 1-A

 $\frac{639464-27-0}{\text{RL: RCT (Reactant); RACT (Reactant or reagent)}}{\text{(switchable and tunable ligands for Con A based on }\beta-$

RN

cyclodextin|
639464-27-0 CAPUS
L-Tyrosine, N-[4-[(6A-deoxy-β-cyclodextrin-6A-yl)amino]-1,4-dioxobity]|- (9Cl) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

PACE 1-A

REFERENCE COUNT: 41 THERE ARE 41 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

18 ANSWER 15 OF 61 CAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 2006:790933 CAPLUS

DOCUMENT NUMBER:

 $\beta-$ <code>cyclodextrin</code> derivatives as antibacterial agents <code>Fahmi</code>, <code>Nourredine</code>; <code>Schmidtmann</code>, <code>Frank Werner</code>; <code>Hecht</code>, INVENTOR(S):

Sidney

Pinnacle Pharmaceuticals, Inc., USA PCT Int. Appl., 37pp. CODEN: PIXXD2 PATENT ASSIGNEE(S):

SOURCE:

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

E	PATENT NO.					KIND		DATE		APPLICATION NO.						DATE		
	WO 2006083678				A2		20060810			WO 2006-US2801					20060127			
V	WO 2006083678					20061214			BA, BB, BC, BR, BW,									
		W:															CA,	
			CE,	CH,	CM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KC,	KM,	KN,	KP,	KR,

```
KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX,
             MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE,
             SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC,
             VN, YU, ZA, ZM, ZW
        RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
             IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ,
            CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH,
             GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
            KG, KZ, MD, RU, TJ, TM
    AU 2006211173
                        A1
                              20060810
                                           AU 2006-211173
    CA 2596026
                         A1
                                           CA 2006-2596026
                         A1
                                           US 2006-342339
                               20071024
                                           EP 2006-733927
                         A2
        R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
             IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR
                                                                  20070817
    IN 2007KN03008
                                           IN 2007-KN3008
    MX 2007010129
                         A
                               20071116
                                           MX 2007-10129
    KR 2007101347
                                           KR 2007-719399
                         A
    CN 101151037
                        A
                                           CN 2006-80010155
                                                                 20070927
PRIORITY APPLN. INFO.:
                                           US 2005-647841P
                                                              P 20050128
                                           WO 2006-US2801
                                                               W 20060127
OTHER SOURCE(S):
                       MARPAT 145:202884
```

OTHER SOURCE(S): MARPAT 145:202884

AB The invention provides a new class of β- cyclodextrin derivs. I, wherein R is N which is mono-, di- or tri-substituted with alkyl, aralkyl, aryl, heterocyclic ring or heterocyclic alkyl, and any of which substituents can be further substituted with N, O or S which can be further substituted with H, alkyl, aralkyl or aryl; R1 is H, OH, OAc, O-lower alkyl, OMe, OSO3Na, or NH2; R2 is H, OH, OAc, O-lower alkyl, OMe, or O(CH2CH2O)n; n = 1-10, were tested in vitro as antibiotics to which pathogenic bacteria have not been exposed, and thus should not have developed resistance. Numerous bacteria are known to cause diseases in humans. Among these bacteria are Enterococcus faecium, Escherichia coli, Pseudomonas aeruginosa, Bacillus atrophaeus, Staphylococcus aureus, Salmonella choleraesuis, Bacillus anthracis, and many others. A disturbing recent trend has been the development of resistance to existing antibiotics in numerous pathogenic bacteria. There is, therefore, a need for new antibiotics for which resistance has not yet emerged. Preferably, such antibiotics should be members of a new class of antibiotics, thus making evolutionary resistance to these antibiotics more difficult. This new class of antibiotics are derivs. of β- cyclodextrin $(\beta-CD)$, which is a cyclic mol. comprising seven D-glucose units. Thus, I (R = NH2, R1 = R2 = OH) was tested in vitro alone or in

Thus, I (R = NE2, R1 = R2 = OB) was tested in vitro alone or in combination with other drugs as antibiotic against bacteria such as Staphylococcus aureus (MIC > 200 μ g/mL) as antibacterial agent and mammalian cytotoxicity of lung cancer cells A549 (IC50 = 720).

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL

(Biological study); USES (Uses) $(\beta - \ \underline{cyclodextrin} \ \ \text{derivs. as antibacterial agents})$

RN 904908-85-6 CAPLU

β-Cyclodextrin, 6A,6B,6C,6D,6E,6F,6G-heptadeoxy-6A,6B,6C,6D,6E,6F,6G-heptakis(D-lysyl-1-lysyl)amino]-, heneicosahydrochloride (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{HO} \\ \text{H}_2\text{N}-\text{(CH}_2) \text{ 4-CH-C-NH-CH}_2 \\ \text{H}_2\text{N}-\text{(CH}_2) \text{ 4-CH-C-NH} & \text{O} \\ \text{H}_2\text{N} & \text{O} \end{array}$$

PAGE 1-C

---- (CH2)4-NH2

- (CH2)4-NH2

PAGE 2-A

●21 HCl

PAGE 2-B

L8 ANSWER 16 OF 61 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2006:506101 CAPLUS DOCUMENT NUMBER: 146:522042

TITLE: Dinuclear zinc(II) complex of a dipeptide possessing host and quest moieties promoted phosphodiester bond

nost and guest moleties promoted phosphodiester bo cleavage

AUTHOR(S): Goshima, Itsuka; Sakai, Nobue; Izuhara, Nobuko; Yamamura, Hatsuo; Kawai, Masao

CORPORATE SOURCE: Graduate School of Engineering, Nagoya Institute of Technology, Nagoya, Aichi, 466-8555, Japan

SOURCE: Peptide Science (2006), Volume Date 2005, 42nd, 359-360

CODEN: PSCIFQ; ISSN: 1344-7661 Japanese Peptide Society

DOCUMENT TYPE: Journal LANGUAGE: English

PUBLISHER:

AB A symposium report. A dispetide composed of two Orn residues possessing dipicolylaming groups on their side chains, and a Boc and a β-cyclodextrin at the N- and C-termini, resp., as a guest and a host moiety was synthesized. Dimuclear zinc complex of the dispetide effectively promoted phosphodiester bond cleavage due to intramol. host-quest complexation which enabled efficient cooperative functioning of

the two metal ion centers. Addition of an external guest mol. decreased the

activity possibly by controlling the self-inclusion.

936745-36-7DP, zinc complexes 936745-38-9DP, zinc complexes

RL: CAT (Catalyst use); SPN (Synthetic preparation); PREP (Preparation); USES (Uses)

(preparation of zinc complexes of ornithine dipeptide containing both host and guest moieties, and phosphodiester bond cleavage mediated by the zinc-dipeptide complex)

936745-36-7 CAPLUS

CN $\beta - \text{Cyclodextrin, 6A-deoxy-6A-[N2-[(1,1-\text{dimethylethoxy})\,\text{carbonyl}]-N5,N5-}$ bis(2-pyridinylmethyl)-L-ornithyl-N5,N5-bis(2-pyridinylmethyl)-Lornithyl]amino]- (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

PAGE 4-A

- RN 936745-38-9 CAPLUS

Absolute stereochemistry.

PAGE 1-A

PAGE 2-A

PAGE 3-A

PAGE 3-B

PAGE 4-A

R2--- OH

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

18 ANSWER 17 OF 61 CAPLUS COPYRIGHT 2009 ACS on STN 2005:1125845 CAPLUS 143:406148 ACCESSION NUMBER:

DOCUMENT NUMBER: TITLE:

Preparation of peptide-bonded **cyclodextrin** derivative capable of forming host-guest bridge as

shape memory element

INVENTOR(S):

Hamasaki, Keita Shibaura Institute of Technology, Japan PATENT ASSIGNEE (S): Jpn. Kokai Tokkyo Koho, 13 pp.

CODEN: JKXXAF DOCUMENT TYPE: Patent

Japanese LANGUAGE: FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

A JP 2004-107404 JP 2004-107404 PRIORITY APPLN. INFO.: There is disclosed a shape memory element consisting of a polymer capable of forming a helical structure, **cyclodextrin** (host) bonded to the polymer, an affinity compound (guest) having affinity towards cyclodextrin and bonded to the polymer at a position different from that of cyclodextrin wherein a bridge is formed by inclusion of the affinity compound (guest) inside the cavity of cyclodextrin (host) to fix the helical structure of the polymer. The affinity compound is either lipophilic or hydrophorbic. This shape memory element reduces shape memory into a nanoscale and provides shape memory in mol. unit. When external guest (external stimulation) is added after this shape memory element temporarily fixes the helical structure of polymer by forming the host-guest bridge, the affinity guest compound is released from the cavity of the cyclodextrin host as the external guest is included inside the cyclodextrin host, and then the fixation of polymer helical structure is eliminated, resulting in the alteration of the polymer shape. When the external guest is removed, the host-guest bridge is regenerated to restore the memorized helical structure. Thus, Ac-Ala-Glu-Ala-Ala-Lys-Arg-Glu-Ala-Glu(R)-Ala-Arg-Ala-Glu-Ala-Ala-Lys(R1)-Arg-Ala-NH2 (I) (R = 6-amino-6-deoxy-Bcyclodextrin, R1 = naphthalen-2-ylacetyl, cholic acid) were prepared This glycopeptides I reduced the content of α -helix according to CD measurement when adamantanol was added as the external quest. When adamantanol was removed, the a-helix content (shape memory) was restored.

T 867153-80-8P 867153-81-9P

RL: PEP (Physical, engineering or chemical process); PRP (Properties); PYP (Physical process); SPN (Synthetic preparation); PREP (Preparation); PROC (Process)

(preparation of peptide-bonded **cyclodextrin** derivative capable of forming host-guest bridge as nanoscale shape memory element)

867153-80-8 CAPLUS L-Alaniyal-L- α -glutamyl-L-alanyl-L-alanyl-L-lysyl-L-arginyl-L- α -glutamyl-L-alanyl-L-ala

Absolute stereochemistry.

RN

RN 867153-81-9 CAPLUS

Absolute stereochemistry.

PAGE 1-A

PAGE 3-B

L8 ANSWER 18 OF 61 CAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 2005:367931 CAPLUS

DOCUMENT NUMBER: 142:411584

TITLE: Preparation of amphiphilic amino acid-containing

cyclodextrin derivatives

INVENTOR(S): Perly, Bruno; Moutard, Stephane; Pilard, Florence

PATENT ASSIGNEE(S): Commissariat a l'Energie Atomique, Fr.; Universite de Picardie Jules Verne

SOURCE: Fr. Demande, 103 pp. CODEN: FRXXBL

DOCUMENT TYPE: Patent
LANGUAGE: French

LANGUAGE: French FAMILY ACC. NUM. COUNT: 1 PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE 20050429 FR 2861396 A1 20031024 WO 2005042590 A2 WO 2004-FR50519 WO 2005042590 А3 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

RM: BM, GH, GM, KE, LS, MM, MZ, NA, SD, SI, SZ, TZ, UG, ZM, ZM, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, GH, CY, CZ, DE, DK, EE, EE, FI, FR, GB, GR, HU, IE, IT, LU, MC, NI, EL, FT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, MI, MR, NE, SN, TD, TG

EP 1675876 A2 20060705 EP 2004-805762 20041021 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IR, SI, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK

JP 2007509218 T 20070612 US 2006-536144 20041021

US 20070142324 A1 20070621 US 2006-576346 20061120

PRIORITY APPLN. INFO:: FR 2003-50736 A 20031024

WO 2004-FRS0519 W 20040721

OTHER SOURCE(S): MARPAT 142:411584

AB Amphiphilic <u>cyclodextrin</u> derivs. I, wherein RI is substituted amine, R2 is H. Me, 1-9T, hydroxypropyl, sulfo-Ne other, R3 is H, R2 except when R2 is hydroxypropyl; R4 is OH, R1, R2 except when R2 is hydroxypropyl; n is 5-7, were prepared Thus, amine acid-containing <u>cyclodextrin</u> IT was prepared

IT 850342-14-2P

Rd: IMF (Industrial manufacture); RCT (Reactant); SPN (Synthetic preparation); PREF (Preparation); RACT (Reactant or reagent) (preparation of amphiphilic amino acid containing cyclodextrin derives.)

RN 850342-14-2 CAPLUS

CN B-Cyclodextrin, 6A-deoxy-6A-[[4-[[(18]-3-[dodecylamino)-1-[[dodecylamino|caronyl]-3-oxopropyl|amino]-1,4-dioxobutyl]amino]-2A, ZB, ZC, ZD, ZE, ZF, ZC, 3A, 3B, 3C, 3D, 3E, 3F, 3G, 6B, 6C, 6D, 6E, 6F, 6G-elcosa-Omethyl- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

IT 850342-08-4P 850342-10-8P 850342-12-0P 850342-22-2P 850342-24-4P 850342-24-0P

RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP

OMe

(Preparation)

(preparation of amphiphilic amino acid containing cyclodextrin

RN 850342-08-4 CAPLUS

CN B-Cyclodextrin, 6A-deoxy-6A-[[4-[[(1S)-3-(dodecylamino)-1-

[(dodecylamino)carbonyl]-3-oxopropyl]amino]-1,4-dioxobutyl]amino]- (CA TNDEX NAME)

Absolute stereochemistry. Rotation (+).

PAGE 1-A

$$\begin{array}{c} \text{Me} & \text{(CH2)} \\ \text{Me} & \text{(CH2)} \\ \text{Me} & \text{(CH2)} \\ \text{1} \\ \text{N} \\ \text{S} \\ \text{N} \\ \text{H} \end{array}$$

RN 850342-10-8 CAPLUS

CN β-Cyclodextrin, 6A-deoxy-6A-[[4-[[(1S)-4-(dodecylamino)-1-[(dodecylamino)carbonyl]-4-oxobutyl]amino]-1,4-dioxobutyl]amino]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

850342-12-0 CAPLUS RN

β-Cyclodextrin, 6A-deoxy-6A-[[4-[[(18)-3-(dodecylamino)-]-[(dodecylamino)-arbonyl]-3-oxopropyl]amino]-1,4-dioxobutyl]amino]-2A, 2B, 2C, 2D, 2E, 2E, 2G, 6B, 6C, 6D, 6E, 6F, 66-trideca-0-methyl- (CA INDEX NAME)

- 850342-13-1 CAPLUS

 \$\text{\$\text{P-Cyclodextrin}, 6A-6exy-6A-[[4-[[(18)-4-(dodecylamino)-1-[(dodecylamino) earbonyl]-4-oxobutyl]amino]-1,4-dioxobutyl]amino]-2A, 2B, 2C, 2D, 2E, 2F, 2G, 6B, 6C, 6D, 6E, 6F, 66-trideca-0-methyl- (9CI) (CA INDEX) NAME)

RN

 $850342-19-7\quad CAPLUS\\ \beta-Cyclodextrin, 6A-deoxy-6A-[[4-[[(1S)-1-[(dodecylamino) carbonyl]-3-(hexadecylamino)-3-oxopropyl]amino]-1,4-dioxobutyl]amino]- (9CI) (CA INDEX NAME).$

 ${\rm RN}$

 $850342-20-0 \quad CAPLUS \\ \beta-Cyclodextrin, \quad 6A-deoxy-6A-[[4-[[(18)-4-(dodecylamino)-1-[(dodecylamino) = arbonyl]-4-oxobutyl]amino]-1,4-dloxobutyl]amino]-2A, 2B, 2C, 2D, 2B, 2F, 2G, 3A, 3B, 3C, 3D, 3F, 3G, 6B, 6C, 6D, 6E, 6F, 6G-elcosa-0-methyl-(9C1) (CA INDER NAME)$ CN

RN 850342-22-2 CAPLUS

CN B-Cyclodextrin, 6A-deoxy-6A-[[4-[(18]-3-(hexadecylamino]-1-[(hexadecylamino] carbonyl]-3-cxopropyl]amino]-1,4-dixokutyl]amino]-2A, 2B, 2C, 2D, 2E, 2F, 2G, 3A, 3B, 3C, 3D, 3E, 3F, 3G, 6B, 6C, 6D, 6E, 6F, 6G-elcosa-0methyl-(9CI) (CA INDEX NAME)

- 850342-24-4 CAPLUS
- Absolute stereochemistry.

REFERENCE COUNT: THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 19 OF 61 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2004:715220 CAPLUS

DOCUMENT NUMBER:

Molecular Recognition Thermodynamics and Structural Elucidation of Interactions between Steroids and

Bridged Bis(β - $\frac{\text{cyclodextrin}}{\text{Ying-Wei; Yang, En-Cui; Guan, Xu-Dong}}$ Department of Chemistry, State Key Laboratory of AUTHOR(S): CORPORATE SOURCE:

Elemento-Organic Chemistry, Nankai University, Tianjin, 300071, Peop. Rep. China

SOURCE: Journal of Organic Chemistry (2004), 69(20), 6590-6602

CODEN: JOCEAH; ISSN: 0022-3263 American Chemical Society

DOCUMENT TYPE: Journal LANGUAGE:

PUBLISHER:

English

CASREACT 141:395732 OTHER SOURCE(S):

AB A series of bridged bis $(\beta$ - cyclodextrin(CD))s were synthesized, i.e., bridged bis $(\beta$ -CD)s bearing binaphthyl or

biquinoline tethers and bridged bis(B-CD)s possessing

dithiobis(benzoyl) tether, and their complex stability consts. (KS),

enthalpy (ΔH°), and entropy changes (ΔS°) for

the 1:2 inclusion complexation with representative steroids, deoxycholate, cholate, glycocholate, and taurocholate, have been determined in an aqueous phosphate buffer solution of pH 7.20 at 298.15 K by means of titration

microcalorimetry. The original conformations of bridged bis $(\beta$ -

cyclodextrin)s were investigated by CD and 1H ROESY spectroscopy.

Structures of the inclusion complexes between steroids and bridged bis(\$\theta\$-CD\$) is solution were elucidated by 2D NMR expts. Indicating that anionic groups of two steroid mols. penetrate, resp., into the two hydrophobic OC earlites in one 6.6 -bridged bis(\$\theta\$-CD\$) mol. from the secondary rim to give a 1:2 binding mode upon inclusion complexation. The results obtained from titration microalcrimetry and 2D NMR expts. jointly demonstrate that bridged bis(\$\theta\$-CD\$)s tethered by protonated smino group possessing different substituted groups can enhance not only the mol. sinding soliity toward steroids by electrostatic interaction but also mol. selectivity. Thermodynamically, the resulting 1:2 mprocess, bis(\$\theta\$-CD\$) actually supplementated from enhance not only the mol. selectivity. The molynamically the resulting 1:2 mprocess, bis(\$\theta\$-CD\$) actually supplementated by the complex stability manney results from enhalpy gain, accompanied by large conformational charge and extensive desolvation effects for the 1:2 inclusion complexation between bis(\$\theta\$-CD\$)s and steroids.

IT 787551-81-9 787551-82-0 787551-83-1 787551-84-2

RL: CPS (Chemical process); FMU (Formation, unclassified); PEP (Physical, engineering or chemical process); PRP (Properties); FORM (Formation, nonpreparative); PROC (Process)

(mol. recognition thermodn. and CD conformational anal. of binaphthyl tethered bis $(B-\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \)$ inclusion complexes with steroids)

RN 787551-81-9 CAPLUS

N Cholan-24-oic acid, 3,12-dihydroxy-, (3e,38,12a)-, compd. with 6A,6'A-[(13)-[1,1'-binaphthalene]-2,2'-diylibig[mimo(2-oxo-2,1-ethanediyllimino-2,1-ethanediyllimino]]bis[6A-deoxy- β -cyclodextrin] (1:1) (9CI) (CA INDEX NAME)

CM :

CRN 786691-27-8 CMF C112 H168 N6 070

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

24

CRN 83-44-3 CMF C24 H40 04

Absolute stereochemistry.

RN 787551-82-0 CAPLUS

Cholan-24-oic acid, 3,7,12-trihydroxy-,

 $(3\alpha,5\beta,7\alpha,12\alpha)-,$ compd. with

6A,6'A=[(1R)=[1,1'-binaphthalene]=2,2'-diylbis[imino(2-oxo-2,1-ethanediyl)imino-2,1-ethanediylimino]]bis[6A-deoxy- β -cyclodextrin](1:1) (9C1) (CA INDEX NAME]

CM 1

CRN 786691-27-8

CMF C112 H168 N6 070

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM

CRN 81-25-4

CMF C24 H40 05

Absolute stereochemistry.

787551-83-1 CAPLUS Glycine, N= $(3\alpha,9\beta,7\alpha,12\alpha)$ -3,7,12-trihydroxy-24-coholan-24-yll-, compd. with $6A_16^*A$ - $\{(13)$ - $\{1,1\}$ -binaphthalene]-2,2'-diylbis[iminof2-coe-2,1-ethanediyl]iminof2,1-ethanediylimino[]bis[6A-deoxy-p-cyclodextin] [11] (92] (CA INDEX NAME)

CM 1

CRN 786691-27-8 CMF C112 H168 N6 070

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CRN 475-31-0

CMF C26 H43 N O6 Absolute stereochemistry.

787551-84-2 CAPLUS

B-Cyclodextrin, 6A,6'A-[(1R)-[1,1'-binaphthalene]-2,2'-

diylbis[imino(2-oxo-2,1-ethanediyl)imino-2,1-ethanediylimino]]bis[6A-deoxy-, compd. with 2-[[(3 α ,5 β ,7 α ,12 α)-3,7,12-trihydroxy-24-oxocholan-24-yl]amino]ethanesulfonic acid (9CI) (CA INDEX NAME)

CM 1

CRN 786691-27-8

CMF C112 H168 N6 070

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CRN 81-24-3

CMF C26 H45 N 07 S

RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation of binaphthyl bridged bis(β- cyclodextrin) derivs.

786691-27-8 CAPLUS

B-Cyclodextrin, 6A,6'A-[(1R)-[1,1'-binaphthalene]-2,2'-

drylbis[imino(2-oxo-2,1-ethanediyl)imino-2,1-ethanediylimino]]bis[6A-deoxy-(9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

REFERENCE COUNT: 61 THERE ARE 61 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 20 OF 61 CAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 2004:34857 CAPLUS

DOCUMENT NUMBER:

TITLE: Coordination features of difunctionalized B-

cyclodextrins with carnosine: ESI-MS and

spectroscopic investigations on

6A, 6D-di(β-alanyl-L-histidine)-6A, 6D-dideoxy-

β- cyclodextrin and 6A, 6C-di(β-alanyl-L-histidine)-6A, 6C-dideoxy-

β- cyclodextrin and their copper(II)

AUTHOR(S): Mineo, Placido; Vitalini, Daniele; La Mendola, Diego; Rizzarelli, Enrico; Scamporrino, Emilio; Vecchio,

CORPORATE SOURCE: CNR-Sezione di Catania, Istituto di Chimica e

Tecnologia dei Polimeri, Catania, 95125, Italy Journal of Inorganic Biochemistry (2004), 98(2),

CODEN: JIBIDJ; ISSN: 0162-0134

PUBLISHER: Elsevier DOCUMENT TYPE: Journal

SOURCE:

LANGUAGE: English OTHER SOURCE(S):

CASREACT 140:304060 The synthesis and characterization of two β - cyclodextrins

(β-CD) functionalized with two units of carnosine

(β-alanyl-L-histidine) through the amino group,

6A, 6C-(β-alanyl-L-histidine)-6A, 6C-dideoxy-β-

cyclodextrin (ACCDAH) and 6A,6D-(β-alanyl-L-histidine)-6A,6D-

dideoxy-β- cyclodextrin (ADCDAH), are reported. NMR and CD data of the ligands indicate a different interaction of dipeptide chains with upper rim and cavity of β -CD. Analogously, spectroscopic and

electrospray ionization mass spectrometry data show that different copper(II) complex species are formed by the two regioisomers. The ability of carnosine-cyclodextrin derivs. to bind copper ions in

a head-to-tail fashion induces the formation of oligomeric species (up to hexamers) in the case of ACCDAH, where the two carnosine moieties are adjacent, while in the ADCDAH case the mutual interaction between the peptidic chains of two ADCDAH mols, allows the almost exclusive formation

of a copper-assisted self-assembled dimeric species.

393100-96-4 RL: PRP (Properties)

(preparation of carnosine β - cyclodextrin derivs, and their

complexation with copper)

393100-96-4 CAPLUS

L-Histidine, N-(6A-deoxy- β -cyclodextrin-6A-y1)- β -alanyl- (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

PAGE 2-A

527698-29-99 677010-06-98 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of carnosine β - $\underline{cyclodextrin}$ derivs. and their

complexation with copper) RN

527698-29-9 CAPLUS 1-Histidine, 1,1'-(6A,6C-dideoxy-β-cyclodextrin-6A,6C-diyl)bis(β-alany1-(9C1) (CA INDEX NAME)

Absolute stereochemistry.

CN

REFERENCE COUNT: 39 THERE ARE 39 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

18 ANSWER 21 OF 61 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2003:905931 CAPLUS

DOCUMENT NUMBER: 140:246941

AUTHOR(S):

TITLE: Potentiometric, spectroscopic and antioxidant activity studies of SOD mimics containing carnosine

Bonomo, Raffaele P.; Bruno, Valeria; Conte, Enrico; De

Guidi, Guido, La Mendola, Diego; Maccarrone, Giuseppe; Nicoletti, Ferdinando; Rizzarelli, Enrico; Sortino, Salvatore; Vecchio, Graziella

CORPORATE SOURCE: Dipartimento di Scienze Chimiche, Universita di Catania, Catania, 95125, Italy

SOURCE: Dalton Transactions (2003), (23), 4406-4415

CODEN: DTARAF; ISSN: 1477-9226

PUBLISHER: Royal Society of Chemistry

DOCUMENT TYPE: Journal LANGUAGE: English

BANGUAGE: English AB Stability constant values and bonding details of the copper(II) complexes of the β- cyclodextrin functionalized with the carnosine

dipeptide (β-alanyl-L-histidine) at its narrow (CDAH6) or at its wide

(CDAH3) rim were determined in aqueous solution. The potentiometric and spectroscopic data (UV-vis, CD and EPR) show that the involvement of a secondary OH

group induces drastic differences in the coordination properties of CDAH3, in comparison with those of CDAH6. Direct and indirect assays were carried out showing that the copper(II) complexes with the two cyclodextrin derivs. are SOD-mimics with high catalytic activity.
In addition the complex species are scavenger compds. towards •OH radicals, giving rise to a particular kind of copper(II) complexes with a combined activity against two toxic radical species, 0.-2 and .OH. The **cyclodextrin** molety contributes to the scavenger activity, damaging the cellular membranes of neuronal and red blood cells.

393100-96-4D, copper complexes RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(potentiometric, spectroscopic and antioxidant activity studies of SOD mimics containing carnosine)

393100-96-4 CAPLUS

L-Histidine, N-(6A-deoxy- β -cyclodextrin-6A-yl)- β -alanyl- (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

PAGE 2-A

REFERENCE COUNT:

THERE ARE 83 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ACCESSION NUMBER: DOCUMENT NUMBER:

ANSWER 22 OF 61 CAPLUS COPYRIGHT 2009 ACS on STN 2003:494965 CAPLUS

Supramolecular chemistry of cyclodextrin -peptide hybrids: Azobenzene-tagged peptides

10576346

AUTHOR(S): Ueno, Akihiko; Shimizu, Tomoko; Mihara, Hisakazu;

Hamasaki, Keita; Pitchumani, K.

Department of Bioengineering, Graduate School of CORPORATE SOURCE: Bioscience and Biotechnology, Tokyo Institute of

Technology, Yokohama, 226-8501, Japan Journal of Inclusion Phenomena and Macrocyclic

Chemistry (2003), Volume Date 2002, 44(1-4), 49-52

CODEN: JIPCF5; ISSN: 1388-3127

Kluwer Academic Publishers

DOCUMENT TYPE: LANGUAGE: English

AB AC17, which is composed of 17 amino acids and has an azobenzene moiety but has no cyclodextrin (CD) unit in the side chain, exhibits 54%

helix content. However, ACul7, which has both trans-azobenzene and

 $\alpha\text{-CD},$ shows 82% helix content. This result suggests that the helix structure is stabilized by host (CD)-guest (azobenzene) bridge in the side chain of the peptide. The helix content changed by trans-cis

photoisomerization as shown by 64% helix content for ACa17 in its cis form. This result suggests that cis-azobenzene unit is excluded from

the a-CD cavity, thus resulting in the smaller helix content. The helix contents for ACB17, which has both azobenzene and B1-CD, are 94% in the cis form and 87% in the trans form, suggesting that the cis form is included in the β -CD cavity. Azobenzene-tagged CD-peptide

hybrids with histidine unit were also prepared and photoregulation of catalytic activity in ester hydrolysis was examined

<u>595558-87-5</u> <u>595558-90-0</u>

CAT (Catalyst use); PRP (Properties); USES (Uses) (helix content and stabilization of cyclodextrin-oligopeptide conjugates containing cis-trans azobenzene as measured by CD spectra) 595558-87-5 CAPLUS

 $\label{eq:lambda} \text{L-Alaninamide, N-acetyl-L-alanyl-L$ alanyl-N6-[4-[(12)-phenylazo]benzoyl]-L-lysyl-L-arginyl-L-\arglutamyl- $\begin{array}{lll} L-alanyl-N-(6A-deoxy-\beta-cyclodextrin-6A-y1)-L-glutaminyl-L-alanyl-L-arginyl-L-\alpha-glutamyl-L-histidyl-L-alanyl-L-alanyl-L-arginyl- (9CI) \end{array}$ (CA INDEX NAME)

Absolute stereochemistry. Double bond geometry as shown.

PAGE 1-A

PAGE 3-A

PAGE 4-A

PAGE 4-B

595558-90-0 CAPLUS CN

PAGE 2-A

PAGE 3-A

$$\begin{array}{c} C = C \\ & \text{NH} \\ & \text{Mer} \quad CH \\ & C$$

PAGE 3-B

PAGE 4-A

но-

но-

PAGE 5-A

IT 595558-64-8 595558-66-0 595558-68-2

595558-72-8 RL: PRP (Properties)

RN

(helix content and stabilization of <u>cyclodextrin</u> oligopeptide conjugates containing dis-trans azobenzene as measured by CD spectra) 595558-64-8 CAPLUS

N L-Alaninamide, N-acetyl-L-alanyl-L-a-glutamyl-L-alanyl-L-alanyl-L-alanyl-L-a-glutamyl-M-a-glutamyl-M-a-glutamyl-M-a-glutamyl-L-alanyl-L-alanyl-L-alanyl-L-alanyl-L-alanyl-L-alanyl-M-alanyl-M-alanyl-M-alanyl-M-alanyl-M-alanyl-M-alanyl-M-alanyl-N6-[4-[(1E)-phenylazo]benzoyl]-L-lysyl-L-arginyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.

PAGE 1-A

PAGE 2-A

PAGE 3-A

PAGE 4-A

PAGE 4-B

- 595558-66-0 CAPLUS
- 595030-00-0 Garden de, Nacetyl-L-alanyl-L-a-glutamyl-L-alanyl-L-alanyl-L-alanyl-L-alanyl-L-alanyl-L-alanyl-L-alanyl-L-alanyl-L-alanyl-L-a-glutamyl-N-(6A-deoxy-a-cyclodextrin-6A-yl)-I--glutamyl-L-alanyl-L-alanyl-L-anginyl-L-a-qlutamyl-L-alanyl-L-a NAME)

PAGE 2-A

PAGE 3-A

PAGE 4-A

PAGE 4-B

RN 595558-68-2 CAPLUS

CN

L-Alaninamide, N-acetyl-L-alanyl-1-q-glutamyl-L-alanyl-L-alanyl-L-alanyl-L-alanyl-L-acglutamyl-N-(6A-deoxy-B-cyclodextin-6A-yl)l-L-glutamyl-L-alanyl-1-alanyl-1-alanyl-1-alanyl-1-alanyl-1-alanyl-1-alanyl-1-alanyl-1-alanyl-1-alanyl-1-alanyl-1-alanyl-N6-(4-[(1E)-phenylazo]benzoyl]-L-lysyl-1-arginyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Double bond geometry as shown.

PAGE 3-A

RN 595558-72-8 CAPLUS

L-Alaminamide, N-acctyl-1-alanyl-1-\alpha-glutamyl-1-alanyl-1-alanyl-1-alanyl-1-alanyl-1-alanyl-1-alanyl-1-\alpha-glutamyl-1-\alanyl-1-\

Absolute stereochemistry.
Double bond geometry as shown.

PAGE 1-A

PAGE 3-A

- 595558-83-1 595558-84-2 RL: CAT (Catalyst use); PRP (Properties); USES (Uses) (hydrolysis catalytic activity of) 595558-83-1 CAPLUS
- RN
- CN L-Alaninamide, N-acetyl-L-alanyl-L- α -glutamyl-L-alanyl-L-alanyl-L-

 $\label{local_hamiltonian} histidyl-L-arginyl-L-\alpha-glutamyl-L-alanyl-M-(6A-deoxy-\beta-cyclodextrin-6A-yl)-L-glutaminyl-L-alanyl-L-arginyl-L-\alpha-glutamyl-M6-(4-[12]-phenylazo|benzoyl]-L-lysyl-L-alanyl-L-alanyl-L-arginyl-L-alanyl-(9C1) (SC INDEX RAME)$

Absolute stereochemistry. Double bond geometry as shown.

PAGE 1-A

RN 595558-84-2 CAPLUS

RO 395036-98-2 CAPUDO SUBSTANCIA (ACUADA SUBSTANCIA) CAPUDA SUBSTANCIA (ACUADA SUBSTANCIA (ACUADA SUBSTANCIA CAPUDA SUBSTANCIA CAPUDA SUBSTANCIA (ACUADA SUBSTANCIA CAPUDA S

Absolute stereochemistry.

Double bond geometry as shown.

PAGE 1-A

PAGE 3-A

PAGE 3-B

PAGE 4-A

THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS

PAGE 4-B

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 23 OF 61 CAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 2003:491950 CAPLUS

DOCUMENT NUMBER:

Synthesis and characterization of mannosyl mimetic

derivatives based on a β- cyclodextrin

AUTHOR(S): Yockot, Duplex; Moreau, Vincent; Demailly, Gilles;

Djedaini-Pilard, Florence CORPORATE SOURCE: Laboratoire des glucides, Universite Picardie Jules

Verne, Amiens, 80039, Fr. Organic & Biomolecular Chemistry (2003), 1(10),

CODEN: OBCRAK; ISSN: 1477-0520

Royal Society of Chemistry DOCUMENT TYPE: Journal LANGUAGE: English

CASREACT 140:59843

The synthesis of branched $\beta \underline{cyclodextrins}$ substituted with mannosyl mimetic derivs. at one primary hydroxy group is described. It was shown that the self-inclusion phenomenon observed for the target compds.

in water did not preclude the inclusion properties of the

cyclodextrin moiety. 639464-24-7P 639464-25-8P

(Properties); SPN (Synthetic preparation); PREP (Preparation) (synthesis, water solubility, and characterization of mannosyl mimetic derivs, based on bcyclodextrin core)

639464-24-7 CAPLUS

 β -Cyclodextrin, 6A-deoxy-6A-[[4-[[(1S)-1-[(4-hydroxyphenyl)methyl]-2- $(\beta-D-mannopyranosylamino)-2-oxoethyl]$ amino]-1, 4-dioxobutyl] amino]-

(9CI) (CA INDEX NAME)

Absolute stereochemistry.

 $639464-25-8 \quad CAPLUS \\ \beta-Cyclodextrin, & 6A-deoxy-6A-[[4-[[(18)-1-[(4-hydroxyphenyl)methyl]-2-[(0-\alpha-D-mannopyranosyl-(1-43)-0-[\alpha-D-mannopyranosyl-(1-41)-\beta-D-mannopyranosyl)amino]-2-oxoethyl]amino]-1,4-dixxobutyl]amino]-(3CI NIDEX NAME)$

RN CN

HO.

PAGE 2-A

PAGE 3-A

639464-27-0P 639464-31-6P 639464-32-7P

RN

639464-33-6P
RIL RGT (Resonant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(synthesis, water solubility, and characterization of mannosyl mimetic derivs. based on bcyclodextrin core)

639464-27-0 CAPLUS
L-Tyrosine, N-[4-[(6A-deoxy-β-cyclodextrin-6A-yl)amino]-1,4-dioxobutyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

PAGE 1-A

RN

639464-31-6 CAPLUS l-Tyrosine, N-[4-](6A-deoxy- β -cyclodextrin-6A-yl)amino]-1,4-dioxobutyl]-, methyl ester (9CI) (CA INDEX NAME)

PAGE 2-A

RN

 $639464-32-7 \quad CAPLUS \\ \beta-Oyolodextrin, \quad 6A-deoxy-6A-[\{4-[\{18\}-1-[\{4-hydroxyphenyl\}methyl]-2-cox-2-[\{2,3,4,6-tetra-0-benzoyl-\beta-D-mannopyranosyl\}amino]ethyl]amino]-1, \\ 4-dioxobutyl]amino]- \\ (9CI) \quad (CA \ INDEX \ NAME)$ CN

PAGE 2-A

RN

 $\begin{array}{lll} 639464-33-8 & CAPLUS \\ \beta-Cyclodextrin, & 6A-deoxy-6A-[[4-[[(18)-1-[(4-hydroxyphenyl)methyl]-2-oxo-2-[(0-2,3,4,6-betra-0-acetyl-\alpha-D-mannopyranosyl-(1-3)-0-[2,3,4,6-betra-0-acetyl-\alpha-D-mannopyranosyl-(1-6)]-2,4-di-0- \\ \end{array}$ CN

PAGE 3-A

REFERENCE COUNT:

23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 24 OF 61 CAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 2003:236932 CAPLUS DOCUMENT NUMBER: 138:411188

AUTHOR(S): CORPORATE SOURCE: Sensing behavior of fluorescent cyclodextrin /peptide hybrids bearing a macrocyclic metal complex Furukawa, Shuntaro; Mihara, Hisakazu, Ueno, Akihiko Department of Bioengineering, Tokyo Institute of

1057634

```
Technology, Graduate School of Bioscience and
Biotechnology, Yokohama, 226-8501, Japan
URCE: Macromolecular Rapid Communications (2003), 24(2),
```

202-206 CODEN: MRCOE3; ISSN: 1022-1336 Wiley-VCH Verlag GmbH & Co. KGaA

DOCUMENT TYPE: Journal LANGUAGE: English

AB Two kinds of cyclodextrin/peptide (CD/peptide) hybrids bearing

Zall-cyclen or cyclen, Gansyl and β - cyclodextrin [β -CD] units were synthesized as chemosensors for organic anionic mols. Zall-cyclen serves as a ligand site and β -CD is a receptor site for quest mols, while the dansyl unit acts as a fluorescent probe. Examination of the fluorescence behaviors of these CD/peptides suggested that the hybrid containing $2\pi^2$ has larger binding consts, with respect to anionic mols, than

that without Zn2+

T	530105-09-0	530105-15-8	530105-21-6
	530105-26-1	530105-31-8	530105-36-3
	530105-40-9	530105-43-2	530135-56-9
	530135-69-4	530135-74-1	530135-78-5
	530135-79-6	530135-80-9	530136-00-6
	530136-13-1		

RL: FMU (Formation, unclassified); PRP (Properties); FORM (Formation, nonpreparative)

(formation and binding constant of)

RN 530105-09-0 CAPLUS

L-Alaninamico, N-aocetyl-1-alanyl-1-a-glutanyl-1-alanyl-1-alanyl-1-6 [[5-(dinethylamino)-1-naphthalenyl] sulfonyl]-1-laysl-1-arginyl-1-a-glutanyl-1-alanyl-1-a-glutanyl-1-a-g

CM :

CRN 530104-90-6 CMF C144 H238 N36 O65 S

Absolute stereochemistry.

Me s NHac PAGE 3-A

PAGE 4-B

PAGE 5-A

PAGE 5-B

CM 2

CRN 157774-37-3 CMF C10 H15 O



530105-15-8 CAPLUS RN CN

 $\label{eq:controlled} \begin{aligned} & \text{530100-10-6} & & \text{644e} \\ & \text{-$\text{Alaninanide}}, & \text{-$\text{acetyl-L-alany$ $\label{eq:cyclodextrin-6A-yl} -L-glutaminyl-L-alanyl-L-arginyl-L-\alpha-glutamyl-N-([5-(dimethylamino)-1-naphthalenyl]sulfonyl]-L-lysyl-L-alanyl-L-alanyl-L-arginyl-, compd. with tricyolo[3,3,1,13,7]decan-1-ol ion(1-) (1:1) (901) (2:1) (901) (2:1) (901) (2:1) (901) (9$ (CA INDEX NAME)

CM

CRN 530104-95-1 CMF C144 H238 N36 O65 S

Absolute stereochemistry.

PAGE 1-A

PAGE 3-B

PAGE 4-A

NMe₂

10576346

PAGE 4-B

PAGE 5-B

CM

CRN 157774-37-3 CMF C10 H15 O

530105-21-6 CAPLUS RN

CRN 530105-20-5 CMF C10 H16 N

CM

CRN 530104-90-6 CMF C144 H238 N36 065 S

Absolute stereochemistry.

PAGE 1-A

PAGE 2-A

PAGE 3-A

PAGE 4-B

PAGE 5-A

RN 530105-26-1 CAPLUS

L-Alaminamide, N-acetyl-L-alamyl-L-e-glutamyl-L-alamyl-L-alamyl-Ne-[1,4-diox-4-[1(1,4,7)-D-etterasacycloodeo-]-ylacetylloxylamino|butyl)-Llysyl-L-arginyl-L-a-glutamyl-L-alamyl-N-(6A-deoxy-Bcyclodextrin-6A-yl)-L-glutamiyl-L-alamyl-L-arginyl-L-a-glutamyl-Ne-[(5-(dimethylamino)-1-amphthalenyl-sulfonyl)-L-lysyl-L-alamyl-L-alamyl-Larginyl-, compd. with tricyclo[3,3,1,13,7]decan-1-amine ion(1-) (1:1) [GCI] (CA INDEX NAME)

CM

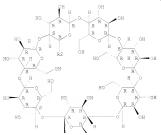
CRN 530105-20-5 CMF C10 H16 N

CM 2

CRN 530104-95-1 CMF C144 H238 N36 065 S

Absolute stereochemistry.

PAGE 1-A



PAGE 4-A

PAGE 4-B

PAGE 5-B

530105-31-8 CAPLUS

NN 5010-0-1-8 CAPUS (AEDUS VARIAN)-L-α-glutamyl-L-alanyl-L-alanyl-N6-[(5-(dimethylamino)-1-naphthalenyl]sulfonyl1-b-lysyl-b-arginyl-L-α-glutamyl-L-alanyl-C6-deoxy-Poylodoxtin-fn-A-yl)-L-glutamyl-L-α-glutamyl-L-α-glutamyl-N6-[(1,4-dloxo-4-([(1,4,7.10-tetra-argyl-dodeox-1-yl-acyl-yl-yl-yl-alanyl-L-α-alanyl-L-arginyl-L-α-glutamyl-N6-[(1,4-dloxo-4-([(1,4,7.10-tetra-arginyl-L-α-dloxyl-dlox)-yl-alanyl-L-alanyl

CM

CRN 530104-90-6 CMF C144 H238 N36 065 S

PAGE 1-A

PAGE 4-B

PAGE 5-A

CM

CRN 65012-54-6 CMF C11 H15 02

CN

RN 530105-36-3 CAPLUS

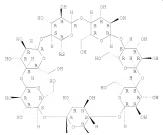
L-Alaninamide, N-acetyl-i-alanyl-i-q-qjutamyl-j-alanyl-i-alanyl-i-balanyl-i-(1,4-dioxo-4-[i(1,4-f)-b-teraszcyclododec-1-ylacetyl)oxylamino|butyl]-L-lysi-1-arginyl-1-q-glutamyl-i-alanyl-i-cacyr-p-cyclodextrin-6A-yl-i-qjutamiyl-i-alanyl-i-arginyl-i-a-qjutamyl-N6-[i(5-(dinethylamino)-1-anshthalenyl)sulfonyl-i-lysyl-i-alanyl-i-arginyl-i-cacyr-

CM 1

CRN 530104-95-1 CMF C144 H238 N36 065 S

Absolute stereochemistry.

PAGE 1-A



PAGE 3-B

10576346

PAGE 4-A

PAGE 4-B

PAGE 5-B

CM

CRN 65012-54-6 CMF C11 H15 O2



RN 530105-40-9 CAPLUS

John Maritanido, Missocyl-L-alanyl-L-a-qlutanyl-L-alanyl-Ho-l[5-(diseblylamino)--nasphthalenyl|sulfoypl-L-lyyyl-L-arginyl-L-a-glutanyl-L-alanyl-M-6A-deoxy-B-cyclodextrin-GA-yl)-L-qlutaminyl-L-alanyl-L-solinyl-L-a-qlutanyl-M-6(1A-dioxo-4-[(l.4,7,10-tetraxaxcycloddec-1-ylacetyl)oxylamino|butyl-L-l-lysyl-L-alanyl-L-alanyl-L-arginyl-, cooped, with (38,9), 78]-3, 7-dihydroxycholan-24oic acid ion(1-) (1:1) (9CI) (CA INDEX NAME)

CRN 530104-90-6 CMF C144 H238 N36 O65 S

Absolute stereochemistry.

PAGE 1-A

PAGE 3-A

PAGE 4-B

PAGE 5-A

PAGE 5-B

CM 2

CRN 14605-01-7 CMF C24 H39 O4

Absolute stereochemistry.

RN 530105-43-2 CAPLUS

i-Alannamide, N-acetyl-i-alanyl-i-q-qlutanyl-i-alanyl-L-alanyl-Nel (1,4-dluox-4-[(1,4,7])-te-traxanyoloddeo-l-ylanetyl) oxylanino|butyl]-L-lysyl-i-arginyl-i-q-glutanyl-I-alanyl-N-(6A-deoxy- β -oyclodxtrin-6A-yl-i-glutaniyl-I-alanyl-1-arginyl-i-aglutanyl-Nel [[5-ddimetylamino]-l-applitalenyl-i-arginyl-i-alanyl-i-alanyl-i-arginyl-, compd. with (3 α ,5 β ,7 β)-3,7-dhiydroxycholan-24-ora did indical (1) [11] [95]] (CA INDEX RAME)

CM 1

CRN 530104-95-1 CMF C144 H238 N36 O65 S

Absolute stereochemistry.

PAGE 1-A

PAGE 3-B

PAGE 4-A

NMe₂

10576346

PAGE 4-B

2 CM

CRN 14605-01-7 CMF C24 H39 O4

Absolute stereochemistry.

530135-56-9 CAPLUS Zinc(2+), [N-acetyl-L-alanyl-L- α -glutamyl-L-alanyl-L-alanyl-N6-[[5-(dimethylamino)-l-naphthalenyl]sulfonyl]-L-lysyl-L-arginyl-L- α -CN $\begin{array}{lll} & glutamyl-L-alanyl-N-(6A-deoxy-\beta-cyclodextrin-6A-yl)-L-glutaminyl-L-alanyl-L-arginyl-L-\alpha-glutamyl-N6-[1,4-dioxo-4-[[(1,4,7,10-alanyl-N6-[1,4-dioxo-4-[[(1,4,7,10-alanyl-N6-[1,4-dioxo-4-[(1,4,7,10-alanyl-N6-[1,4-dioxo-4-[(1,4,7,10-alanyl-N6-[1,4-dioxo-4-[(1,4,7,10-alanyl-N6-[1,4-dioxo-4-[(1,4,7,10-alanyl-N6-[1,4-dioxo-4-[(1,4,7,10-alanyl-N6-[1,4-dioxo-4-[(1,4,7,10-alanyl-N6-[1,4-dioxo-4-[(1,4,7,10-alanyl-N6-[1,4-dioxo-4-[(1,4,7,10-alanyl-N6-[1,4-dioxo-4-[(1,4,7,10-alanyl-N6-[1,4-dioxo-4-[(1,4,7,10-alanyl-N6-[1,4-dioxo-4-[(1,4,7,10-alanyl-N6-[1,4-dioxo-4-[(1,4,7,10-alanyl-N6-[1,4-dioxo-4-[(1,4,7,10-alanyl-N6-[1,4-dioxo-4-[(1,4,7,10-alanyl-N6-[1,4-dioxo-4-[(1,4,7,10-alanyl-N6-[1,4-dioxo-4-[(1,4,7,10-[1,4,7])-[(1,4,7,10-[1,4,7])-[(1,4,7,10-[1,4,7])-[(1,4,7,10-[1,4,7])-[(1,4,7,10-[1,4,7])-[(1,4,7,10-[1,4,7])-[(1,4,7,10-[1,4,7])-[(1,4,7,10-[1,4,7])-[(1,4,7,10-[1,4,7])-[(1,4,7,10-[1,4,7])-[(1,4,7,10-[1,4,7])-[(1,4,7])-[$ tetraazacyclododec-1-y1-kN1,kN4,kN7,kN10)acetyl]ox y]amino]butyl]-L-lysyl-L-alanyl-L-alanyl-L-arginyl-L-alaninamide]aqua-,

(SP-5-14)-, salt with tricyclo[3.3.1.13,7]decan-1-ol (1:1) (9CI) (CA INDEX NAME)

CM

CRN 530104-93-9 CMF C144 H240 N36 O66 S Zn CCI CCS

PAGE 1-A

PAGE 1-B

PAGE 1-C

PAGE 5-A

CM 2

CRN 157774-37-3 CMF C10 H15 O

RN 530135-69-4 CAPLUS

Nation 2-0 and the second of the second of

KAI, KK., KA., KA. () accety_loxy|am.no.(Ga-toy)=rysyl-i--rysyl-i-acyloxyl-

CM 1 CRN 530104-98-4

CMF C144 H240 N36 O66 S Zn

PAGE 1-A

PAGE 2-A

PAGE 3-A

PAGE 5-A

PAGE 6-B

CM 2

CRN 157774-37-3 CMF C10 H15 O

RN 530135-74-1 CAPLUS

CM I

CRN 530105-20-5 CMF C10 H16 N

HN-

CM

CRN 530104-93-9 CMF C144 H240 N36 066 S Zn CCI CCS

PAGE 1-A

PAGE 1-C

 $\sim_{\rm NH_2}$

PAGE 3-A

PAGE 4-A

PAGE 5-A

RN

CN The state of the s

CM 1

CRN 530105-20-5 CMF C10 H16 N



CM 2

CRN 530104-98-4 CMF C144 H240 N36 066 S Zn CCI CCS

PAGE 1-A

PAGE 2-A

PAGE 3-A

PAGE 4-A

PAGE 5-A

PAGE 6-B

RN 530135-79-6 CAPLUS

 $\label{eq:local_local_local} 2 Ino(2+), \ [N-acetyl-L-alanyl-L-\alpha_glutamyl-L-alanyl-L-alanyl-Ne-[[5-(dimethylamino)-l-naphthalenyl] sulfonyl]-L-lysyl-L-arginyl-L-\alpha-glutamyl-L-alanyl-Ne-(A-coxy)-B-cyclodextrin-E-A-yl-1-l-glutamiyl-L-alanyl-L-arginyl-L-\alpha-glutamyl-Ne-[[1,4-dioxo-4-[[(1,4,7,10-alanyl-Ne-[1,4-dioxo-4-[[(1,4,7,10-alanyl-Ne-[1,4-dioxo-4-[[(1,4,7,10-alanyl-Ne-[1,4-dioxo-4-[[(1,4,7,10-alanyl-Ne-[1,4-dioxo-4-[[(1,4,7,10-alanyl-Ne-[1,4-dioxo-4-[[(1,4,7,10-alanyl-Ne-[1,4-dioxo-4-[[(1,4,7,10-alanyl-Ne-[1,4-dioxo-4-[[(1,4,7,10-alanyl-Ne-[1,4-dioxo-4-[[(1,4,7,10-alanyl-Ne-[1,4-dioxo-4-[(1,4,7,10-alanyl-Ne-[1,4-dioxo-4-[(1,4,7,10-alanyl-Ne-[1,4-dioxo-4-[(1,4,7,10-alanyl-Ne-[1,4-dioxo-4-[1,4-dioxo$

CM 1

CRN 530104-93-9

CMF C144 H240 N36 066 S Zn CCI CCS

PAGE 1-A

PAGE 1-B

PAGE 1-C

PAGE 5-A

CM 2

CRN 65012-54-6 CMF C11 H15 02

-02C

CN

RN 530135-80-9 CAPLUS

CM 1

CRN 530104-98-4 CMF C144 H240 N36 066 S Zn

PAGE 1-A

PAGE 2-A

PAGE 3-A

PAGE 5-A

PAGE 6-B

CM :

CRN 65012-54-6 CMF C11 H15 02

RN 530136-00-6 CAPLUS

CN Zinc(Z+), [N-acetyl-L-alanyl-L-α-glutamyl-L-alanyl-Me-[[5-(dimethylamino)-1-aphthelenyl] sulfonyl-L-plyyl-L-acqinyl-L-α-quitamyl-L-alanyl-Ne-[[6-(dosey-β-cyclodextin-6A-yl)-L-qlutaminyl-L-alanyl-Ne-(6A-dosey-β-cyclodextin-6A-yl)-L-qlutaminyl-L-alanyl-L-acqinyl-L-α-quitamyl-Me-[[(1, 4-d)xo-4-[(1, 4-d)xo-4-[(1, 4-d)xo-4-[(1, 4-d)xo-4-q](-1, 4-d)xo-4-q](-1, 4-d)xo-4-q-alanyl-L-alanyl-L-alanyl-L-alanyl-L-alanyl-L-alanyl-L-alanyl-alanyl-alaninamide] aqua-(SP-5-14)-, salt with (30.5β, 78)-3, 7-dihydroxycholan-24-olc acid (11) (201) (CA INDEX NAME)

CM 1

CRN 530104-93-9 CMF C144 H240 N36 066 S Zn

PAGE 1-A

PAGE 1-B

PAGE 1-C

 $\sim_{\rm NH_2}$

PAGE 3-A

PAGE 4-A

PAGE 5-A

CM

CRN 14605-01-7

CMF C24 H39 O4

Absolute stereochemistry.

530136-13-1 CAPLUS
Zinc(2+), [N-acetyl-L-alanyl-L-ac-glutanyl-L-alanyl-L-alanyl-N6-[1,4-dixx-4-f[[1,4-f,1]0-tetraazacyolododec-1-yl-kN1,kN4,kN7,kN10]acetyl]oxylanino[butyl]-L-lysyl-L-kN1,kN4,kN7,kN10]acetyl]oxylanino[butyl]-L-chapyl-L-ch CN argnyl-1-a-qlutamyl-1-alanyl-N-(6A-deoxy-B-oyolodextrin-6A-yl)L-glutaminyl-1-alanyl-1-arginyl-1-a-qlutamyl-N6-[[5-(dimethylamino)1-naphthalenyl]sulfonyl]-L-lysyl-L-alanyl-L-alanyl-L-arginyl-Lalaninamide|aqua- (SF-5-14)-, salt with $(3\alpha, 5\beta, 7\beta)$ -3,7-dihydroxycholan-24-oic acid (1:1) (9CI) (CA INDEX NAME)

CM

CRN 530104-98-4 CMF C144 H240 N36 066 S Zn CCI CCS

PAGE 2-A

PAGE 3-A

PAGE 4-A

PAGE 5-A

ACNH Me

PAGE 6-B

CM

CRN 14605-01-7

CMF C24 H39 O4

Absolute stereochemistry.

530104-90-6 530104-95-1 530104-98-4 RL: ARU (Analytical role, unclassified); DEV (Device component use); PRP (Properties); ANST (Analytical study); USES (Uses)

(sensing behavior of fluorescent **cyclodextrin**/peptide hybrids bearing a macrocyclic zinc complex and their applications for sensing organic anionic mols.)

530104-90-6 CAPLUS

CN L-Alaninamide, N-acetyl-L-alanyl-L- α -glutamyl-L-alanyl-L-alanyl-N6- $[5-(dimethylamino)-1-naphthalenyl]sulfonyl]-L-lysyl-L-arginyl-L-<math>\alpha$ -tetraazacyclododec-[-ylacetyl)oxy]amino]butyl]-L-lysyl-L-alanyl-L-alanyl-L-arginyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 3-A

PAGE 4-B

PAGE 5-A

PAGE 5-B

PAGE 1-A

RN 530104-95-1 CAPLUS

Le-Alanthamide, N-acetyl-1-alanyl-1-e-glutamyl-1-alanyl-1-alanyl-16-11,4-dioxo-4-[[(1,4,7].0-tetranazayeloddec-1-yl-netyl-netyl-nyl-alanyl-1leyyl-1-arginyl-1-e-glutamyl-1-alanyl-N-(6A-deoxy-Bcyclodext-in-6A-yl)-1-qlutaminyl-1-alanyl-1-arginyl-1-arginyl-1-arginyl-1-arginyl-1-arginyl-1-arginyl-1-arginyl-1-arginyl-1-alanyl-1-arginyl-1-alanyl-1-alanyl-1-arginyl-1-gloyl) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 3-B

PAGE 3-A

PAGE 4-A

PAGE 4-B

RN 530104-98-4 CAPLUS

$$\label{eq:continuous} \begin{split} &\text{Solida-So-a} &\quad \text{Carlos} \\ &\text{Sino(2+)}, &\quad \text{N-acetyl-L-alanyl-L-}\alpha-\text{glutamyl-L-alanyl-K-11,4-}\\ &\text{dixoo-4-[[[[1,4,7,7]0-\text{tetraazaayelododec-l-yl-}K],K-1,8,7,8,10] acetyl loxyl amio blutyl-1-b-layl-L-arginyl-1--q-glutamyl-b-alanyl-N-(6A-dooxy-B-cyclodextrin-6A-yl)-l-glutamyl-l-l-alanyl-1-arginyl-1--a-qlutamyl-M-[[B-(dimethylamino)-l-naphthalenyl] sulfonyl-1-l-arginyl-1-a-alanyl-1-alanyl-1-arginyl-1-arginyl-1-alanyl-1-argi$$

PAGE 1-A

PAGE 2-A

PAGE 3-A

PAGE 5-A

PAGE 6-B

530104-93-99 BLI, ABV (Amelytical role, unclassified); DEV (Device component use); PRP (Propertice); SPN (Synthetic preparation); ANST (Analytical study); PREP (Preparation); USES (Uses) (sensing behavior of fluorescent <u>oyelodextrin</u>)peptide hybrids bearing a macrocyclic zinc complex and their applications for sensing

organic anionic mols.) 530104-93-9 CAPLUS

 $\label{eq:line} Zinc(2+), \ [N-acetyl-L-alanyl-L-a-glutamyl-L-alanyl-L-alanyl-N6-[[5-(dimethylamino)-1-naphthalenyl]sulfonyl]-L-lysyl-L-arginyl-L-\alpha-$ Gurany-L-marginy-L-de glutany-L-(6-doxy-B-cyclodextin-6-A-y)-L-glutany-L-de glutany-L-marginy-L-de glutany-L-marginy-L-de glutany-L-de glutany-L-de

PAGE 1-A

PAGE 1-B

 $\sim_{\rm NH_2}$

PAGE 3-A

PAGE 4-A

PAGE 5-A

REFERENCE COUNT: THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 25 OF 61 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2003:44746 CAPLUS DOCUMENT NUMBER: 139:53274

Molecule-Responsive Fluorescent Sensors of α-Helix Peptides Bearing α-

Cyclodextrin, Pyrene and Nitrobenzene Units in

Their Side Chains Hossain, Mohammed Akhter; Takahashi, Keiko; Mihara, AUTHOR(S):

Hisakazu; Ueno, Akihiko

CORPORATE SOURCE: Graduate School of Bioscience and Biotechnology,

Department of Bioengineering, Tokyo Institute of Technology, Midori, Yokohama, 226-8501, Japan Journal of Inclusion Phenomena and Macrocyclic SOURCE:

Chemistry (2002), 43(3-4), 271-277

CODEN: JIPCF5: ISSN: 1388-3127

PUBLISHER: Kluwer Academic Publishers

DOCUMENT TYPE: Journal LANGUAGE: English

OTHER SOURCE(S):

CASREACT 139:53274 $\alpha\text{-Helix}$ peptides bearing one unit of $\alpha\text{-}\underbrace{\text{cyclodextrin}}_{\text{(α-CD)}}$, one unit of pyrene and one unit of nitrobenzene (NB) in

their side chains have been designed and synthesized as novel mol.-responsive devices. In both CD-peptides, α -PR17 and a-PL17, the NB unit is separated from the CD unit by two turns of the helix. Two reference peptides (PL17, and PL17) have also been synthesized. The CD studies in the peptide absorption region (200-250 nm) of α -PR17 and α -PL17 suggest that the CD-peptides form stable

α-helix structures (83-77%), which was destabilized by accommodating quest mols. (e.g., n-pentanol) into the CD cavity. It suggests that formation of intramol, host-guest (CD-NB) complex stabilized the helical structure and exogenous guest mol. excluded the appending NB moiety from inside to outside of the CD cavity, thereby causing destabilization of the helical structure and increasing the random coil content. The ICD spectra of the peptides in the pyrene and nitrobenzene absorption region (250-40 nm) suggest that NB forms inclusion complex with CD. The fluorescence studies revealed that the fluorescence of the pyrene unit is quenched by the NB unit in α -PR17 and α -PL17. The fluorescence intensity

increases with increasing quest concentration for the CD-peptides. quest-responsive enhancement in the fluorescence intensity can be explained in terms of increased distance between the pyrene and NB moleties, which is caused by exclusion of the NB moiety from the CD cavity

```
by guest accommodation. Using the guest-responsive fluorescence quenching
properties of the CD-peptides, we have obtained binding consts. for
various short chain alkanols. α-PL17 has higher binding affinity to
the guest mols. than its isomer, \alpha\text{-PR17}, indicating that the
location of functional groups on the peptide scaffold is important in mol.
detection.
```

 543717-26-6
 543717-28-8
 543717-30-2

 543717-32-4
 543717-34-6
 543717-36-8

 543717-38-0
 543717-40-4
 543717-43-7

RL: FMU (Formation, unclassified); FORM (Formation, nonpreparative) (mol.-responsive fluorescent sensors of α -helix peptides bearing α- cyclodextrin, pyrene and nitrobenzene units in their side chains)

543717-26-6 CAPLUS

L-Alaninamide, N-acetyl-L-alanyl-L-q-glutamyl-L-alanyl-3-(1-pyrenyl)- $\texttt{L-alanyl-L-alanyl-L-lysyl-L-}\alpha - \texttt{glutamyl-N-(6A-deoxy-}\alpha -$ lysyl-, compd. with 1-butanol (1:1) (9CI) (CA INDEX NAME)

CRN 543717-12-0 CMF C135 H202 N24 O57

Absolute stereochemistry.

PAGE 1-A

PAGE 2-A

PAGE 2-C

CM

CRN 71-36-3 CMF C4 H10 O

H3C-CH2-CH2-CH2-OH

RN 543717-28-8 CAPLUS

N 1-Alaninanide, N-acetyl-L-alanyl-1-a-sjutamyl-N6-[4-(4-nitrophenyl)-1-acetyl-1-a-sylv-1-a-anyl-1-a-anyl-1-a-anyl-1-a-anyl-1-a-anyl-1-a-anyl-1-a-anyl-1-a-anyl-1-a-anyl-1-a-anyl-1-a-anyl-1-a-anyl-1-a-anyl-1-anyl-1-a-anyl-1-any

CM 1

CRN 543717-14-2 CMF C135 H202 N24 057

Absolute stereochemistry.

PAGE 1-A

PAGE 2-A

PAGE 2-C

CM

CRN 71-36-3 CMF C4 H10 O

H3C-CH2-CH2-CH2-OH

RN 543717-30-2 CAPLUS

 $\label{eq:local_control} $$ L^{-\alpha}_{n-1} = L^{-\alpha}_{n-1} + L^{\alpha}_{n-1} + L^{-\alpha}_{n-1} + L^{\alpha}_{n-1} + L^{\alpha}_{n-1} + L^{\alpha}_{n-1} + L^{\alpha}_{n-1} + L^{\alpha}_{n-1}$

lysyl-, compd. with 2-methyl-1-propanol (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 543717-12-0 CMF C135 H202 N24 057

Absolute stereochemistry.

PAGE 1-A

PAGE 2-A

DACE 2_D

CM 2

CRN 78-83-1 CMF C4 H10 O

CHa

CN

H3C-СН-СН2-ОН

RN 543717-32-4 CAPLUS

L-Alaninamide, N-acetyl-L-alanyl-L-a-glutanyl-M6-[4-(4-nitrophenyl)-l-oxoburyl]-L-lysyl-L-alanyl-L-alanyl-L-ysyl-L-a-glutanyl-L-alanyl-L-alanyl-N-(6A-deoxy-a-cyclodextrin-6A-yl)-L-glutaniyl-L-lysyl-L-a-glutanyl-L-alanyl-L-l-ysyl-L-a-glutanyl-L-alanyl-L-l-ysyl-L-a-glutanyl-L-alanyl-L-glutaniyl-L-groganol (1:1) (9:1) (CA INDEX MAME)

CM

CRN 543717-14-2 CMF C135 H202 N24 O57

Absolute stereochemistry.

PAGE 1-A

PAGE 2-A

PAGE 2-B

PAGE 2-C

CRN 78-83-1 CMF C4 H10 0

EH2

H3C-CH-CH2-OH

RN 543717-34-6 CAPLUS

N L-Alaninamide, N-acetyl-L-alanyl-L-a-glutamyl-L-alanyl-3-(1-pyrenyl)L-alanyl-L-alanyl-L-lysyl-L-a-glutamyl-N-(6A-deoxy-acyslodeytrin-6A-wl)-sl-alytaminyl-L-alanyl-L-alanyl-L-alanyl-l-a-glutamyl-N-alanyl-L-a-glutamyl-N-alanyl-L-a-glutamyl-N-alanyl-1-a-glutamyl-N-alanyl-L-a-glutamyl-N-alanyl-N-a

 $\label{eq:coclodextrin-6A-yl}-L-glutaminyl-L-alanyl-L-alanyl-L-lysyl-L-a-glutamyl-i-alanyl-i-alanyl-Ne-[4-(4-nitrophenyl)-1-acobutyl]-L-lysyl-L-lysyl-L-lysyl-L-glysyl-g$

CM

CRN 543717-12-0 CMF C135 H202 N24 057

Absolute stereochemistry.

PAGE 1-A

PAGE 2-A

PAGE 2-C

CM 2

CRN 71-41-0 CMF C5 H12 O

Me- (CH2)4-0H

RN 543717-36-8 CAPLUS

Jajj-7-0-6 GARDUS CARDUS CARDOS CARDUS CARDUS CARDUS CARDUS CARDUS CARDUS CARDUS CARDUS CARDU

CM

CRN 543717-14-2 CMF C135 H202 N24 O57

Absolute stereochemistry.

PAGE 1-A

PAGE 2-A

PAGE 2-B

PAGE 2-C

CM 2

CRN 71-41-0 CMF C5 H12 O

Me- (CH2)4-OH

RN 543717-38-0 CAPLUS

CN L-Alaninamide, N-acetyl-L-alanyl-L-α-glutamyl-L-alanyl-3-(1-pyrenyl)L-alanyl-L-alanyl-L-lysyl-L-α-glutamyl-N-(6A-deoxy-αcyclodextrin-6A-yl-1-glutaminyl-L-alanyl-L-alanyl-L-lysyl-L-αglutamyl-L-alanyl-L-alanyl-N-6-(4-(4-nitrophenyl)-1-oxobutyl)-L-lysyl-Llysyl-, compd. with 3-methyl-1-butanol (11) (9GI) (CA INDEX NAME)

CM 1

CRN 543717-12-0 CMF C135 H202 N24 O57

Absolute stereochemistry.

PAGE 1-A

PAGE 2-A

PAGE 2-C

CM

CRN 123-51-3 CMF C5 H12 O

Me2CH-CH2-CH2-OH

RN 543717-40-4 CAPLUS

N L-Alaninamide, N-acetyl-L-alanyl-L-a-g-jutamyl-Mc-[4-(d-nitrophenyl-1-2-oxbutyl)-L-lysyl-L-alanyl-L-lalanyl-L-alanyl-L-alanyl-L-alanyl-M-(6A-deoxy-ac-cyclodextrin-6A-yl)-L-glutaminyl-L-lysyl-L-a-g-jutamyl-L-alanyl-1-3-(1-pyrenyl)-L-alanyl-L-alanyl-L-lysyl-, compd. with 3-methyl-1-butanol (1:1) (901) (CA INDEX NAME)

CM 1

CRN 543717-14-2 CMF C135 H202 N24 057

Absolute stereochemistry.

PAGE 1-A

PAGE 2-A

PAGE 2-B

PAGE 2-C

CM

CRN 123-51-3 CMF C5 H12 O

Me2CH-CH2-CH2-OH

RN 543717-43-7 CAPLUS

 $\label{eq:local_control} $$ L^{\alpha}_{-1} = 1 - 1 - 1 - 1 - \alpha - \beta + \alpha -$

lysyl-, compd. with 1-hexanol (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 543717-12-0 CMF C135 H202 N24 O57

Absolute stereochemistry.

PAGE 1-A

PAGE 2-A

PAGE 2-B

CM 2

CRN 111-27-3 CMF C6 H14 O

HO- (CH2) 5-Me

CN

RN 543717-45-9 CAPLUS

D43)1-40-7 _dramatide, N-acetyl-L-alanyl-L-q-glutamyl-N6-[4-(4-nitrophenyl)-l-oxobutyl-l-i-lysyl-L-alanyl-L-lsysyl-L-q-glutamyl-L-lsysyl-L-q-alanyl-L-alanyl-L-q-glutamyl-L-alanyl-L-alanyl-L-alanyl-L-alanyl-L-alanyl-S-(3-4-0x)-q-glutamyl-L-alanyl-3-(1-pyrenyl)-L-alanyl-L-alanyl-L-lysyl-, compd. with l-hoxanol (ii) (951) (CA INDEX NAME)

CM I

CRN 543717-14-2 CMF C135 H202 N24 057

Absolute stereochemistry.

PAGE 1-A

PAGE 2-A

PAGE 2-B

PAGE 2-C

CM

CRN 111-27-3 CMF C6 H14 O HO- (CH2)5-Me

543717-12-0P 543717-14-2P RR: PRP (Properties); SPN (synthetic preparation); PREP (Preparation) (mol.-responsive fluorescent sensors of α -helix peptides bearing $\alpha \underline{\text{cyclodextrin}},$ pyrene and nitrobenzene units in their

side chains) 543717-12-0 CAPLUS

L-Alaninamide, N-acetyl-L-alanyl-L-α-glutamyl-L-alanyl-3-(1-pyrenyl)-L-alanyl-L-alanyl-L-lysyl-L- α -glutamyl-N-(6A-deoxy- α -Drataniy: Linky; Linky;

Absolute stereochemistry.

PAGE 2-C

RN 543717-14-2 CAPLUS

Jacob Landson (N-acctyl-L-alanyl-L-α-glutamyl-Mc-[4-(4-nitrophenyl)-l-α-klaninamide, N-acctyl-L-alanyl-L-alanyl-L-ysyl-L-α-glutamyl-L-alanyl-L-ala

Absolute stereochemistry.

PAGE 2-A

PAGE 2-B

PAGE 2-C

REFERENCE COUNT: 29 THERE ARE 29 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 26 OF 61 CAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 2002:947909 CAPLUS DOCUMENT NUMBER: 138:401995

Copper(II) assisted self-assembly of functionalized

β- cyclodextrins with β-alanyl-L-histidine

La Mendola, Diego; Mineo, Placido; Rizzarelli, Enrico;

Scamporrino, Emilio; Vecchio, Graziella; Vitalini,

CORPORATE SOURCE: Dipartimento di Scienze Chimiche, Universita di

Journal of Supramolecular Chemistry (2002), Volume

CODEN: JSCOC9; ISSN: 1472-7862

Pergamon Press DOCUMENT TYPE:

LANGUAGE: English

A combined UV-visible, CD and ESI-MS spectroscopic approach has been followed to obtain the speciation and the bonding details of copper(II) complexes with $\beta-$ <code>cyclodextrins</code> functionalized by means of the bio-active peptide $\beta-$ alanyl-L-histidine (carnosine). A new metal-assisted self-assembled system of bifunctionalized $\beta-$

cyclodextrins has been shown to exist.

393100-96-4P 527698-29-9P RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT

(Reactant or reagent) (supramol. assembly of functionalized β -alanyl-L-histidine linked

 $\beta-$ cyclodextrins with copper (II) inclusion complexes) 393100-96-4 CAPLUS

L-Histidine, N-(6A-deoxy-β-cyclodextrin-6A-yl)-β-alanyl- (CA INDEX NAME)

Absolute stereochemistry.

- RN
- 527698-29-9 CAPLUS
 L-Histidine, 1,1'-(6A,6C-dideoxy-β-cyclodextrin-6A,6C-diyl)bis[β-alanyl-(9CI) (CA INDEX NAME) CN

Absolute stereochemistry.

PAGE 1-A

PAGE 2-A

L8 ANSWER 27 OF 61 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2002:933092 CAPLUS

DOCUMENT NUMBER:

Fluorescent **cyclodextrin**/peptide hybrids with a novel guest-responsive chemosensor in the

peptide side chain

AUTHOR(S): Toyoda, Takayuki; Mihara, Hisakazu; Ueno, Akihiko Department of Bioengineering, Graduate School of CORPORATE SOURCE: Bioscience and Biotechnology, Tokyo Institute of

Technology, Yokohama, 226-8501, Japan Macromolecular Rapid Communications (2002), 23(15),

CODEN: MRCOE3; ISSN: 1022-1336 PUBLISHER: Wiley-VCH Verlag GmbH & Co. KGaA

DOCUMENT TYPE:

LANGUAGE: CASREACT 138:321555

Peptides bearing β - cyclodextrin and

4-(N,N-dimethylamino)benzoyl (DMAB) units in the peptide side chains were prepared as chemosensors for mol. detection. The DMAB unit was expected to be included into the cyclodextrin cavity intramolecularly.

However, these peptides exhibited no twisted intramol. charge transfer fluorescence and the normal fluorescence intensity decreased upon the addition of 1-adamantanol as an exogenous guest, indicating that the DMAB units are shallowly included in the cyclodextrin cavities.

512847-95-9P 512847-96-0P 512847-97-1P 512847-98-2P

RL: PRP (Properties); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(fluorescent cyclodextrin/peptide hybrids with novel

guest-responsive chemosensor in peptide side chain) 512847-95-9 CAPLUS

L-Alaninamide, N-acetyl-L-alanyl-L-\acetyl-L-alanyl-L-alanyl-N-(6A-deoxy-

β-cyclodextrin-6A-yl)-L-glutaminyl-L-alanyl-L-lysyl-L-αglutamyl-N6-[4-(dimethylamino)benzoyl]-L-lysyl-L-alanyl-L-alanyl-L-lysyl-Lα-glutamyl-L-alanyl-L-alanyl-L-alanyl-L-lysyl- (9CI) (CA INDEX NAMEL

Absolute stereochemistry.

PAGE 2-B

PAGE 3-A

RN 512847-96-0 CAPLUS

cos 1289 1-90-0 Cartus L-Alaniando, N-acetyl-L-alanyl-L-α-glutamyl-L-alanyl-N6-[4-(dimethylamino) benzoyl]-L-lysyl-L-alanyl-L-lysyl-L-α-glutamyl-N-(6Adeoxy-P-cyolodextrin-6-xyl)-L-glutamyl-L-alanyl-L-alanyl-L-ysyl-Lα-glutamyl-L-alanyl-L-alanyl-L-alanyl-L-lysyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

PAGE 2-A

PAGE 2-B

512847-97-1 CAPLUS RN

Absolute stereochemistry.

PAGE 1-A

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

PAGE 2-B

RN CN

Absolute stereochemistry.

PAGE 1-A

PAGE 3-B

PAGE 3-B

512847-99-3P 512848-00-9P 512848-01-0P

512248-92-17
RI: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation) (fluorescent cyclodextrin/peptide hybrids with novel quest-responsive chemosensor in peptide side chain) 51247-99-3 CAPLUS

- RN
- $L-Alaninamide, N-acetyl-L-alanyl-L-\alpha-glutamyl-L-alanyl-L-alanyl-N-(6A-deoxy-\beta-cyclodextrin-6A-yl)-L-glutaminyl-L-alanyl-b-1ysyl-b-a-u-glutamyl-L-alanyl-b-1ysyl-L-alanyl-L-alanyl-L-ysyl-L-alanyl-L-al$

 $\alpha\text{-glutamyl-L-alanyl-L-alanyl-L-alanyl-L-lysyl-, compd. with tricyclo[3.3.1.13,7]decan-1-ol (1:1) (9CI) (CA INDEX NAME)$

CM 1

CRN 512847-95-9 CMF C124 H204 N24 060

Absolute stereochemistry.

PAGE 2-B

PAGE 3-A

PAGE 3-B

CM

CRN 768-95-6 CMF C10 H16 0

- $$\label{eq:condition} \begin{split} &\text{512848-00-9 CAPLUS} \\ &\text{L-Alaninamide, N-accetyl-L-alanyl-L-a-glutamyl-L-alanyl-N6-[4-(dimethylamino)benzoyl]-L-lysyl-L-alanyl-L-lysyl-L-a-glutamyl-N-(6A-decoxy-B-cyclodextrin-6A-yl)-L-glutamyl-L-alanyl-L-alanyl-L-lysyl-L-a-glutamyl-L-alanyl-L-$$
 CN

tricyclo[3.3.1.13,7]decan-1-ol (1:1) (9CI) (CA INDEX NAME)

CRN 512847-96-0 CMF C124 H204 N24 060

Absolute stereochemistry.

CM

CRN 768-95-6 CMF C10 H16 O

512848-01-0 CAPLUS RN

CN $\label{eq:lambda} \text{L-Alaninamide, N-acetyl-L-alanyl-L-$ L-Alannamice, N-acctyl-L-alanyl-L-a-q-gutamyl-L-alanyl-L-alanyl-L-q-alanyl-L-q-alanyl-L-q-alanyl-L-q-alanyl-L-q-alanyl-L-q-alanyl-L-alanyl

CM

CRN 512847-97-1 CMF C124 H204 N24 O60

Absolute stereochemistry.

PAGE 1-A

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

10576346

PAGE 2-B

PAGE 3-B

CM 2

CRN 768-95-6 CMF C10 H16 0

RN 512848-02-1 CAPLUS

No. J. Zeobaruzari Caribos
La La Inanyi Li-alanyi Li-alanyi Li-alanyi Li-alanyi Li-alanyi Li-alanyi Li-alanyi Li-alanyi Li-a-qi tutamyi Ne6-14- (dimethyi amino benzoyi Li-Liyayi Li-alanyi Li-alan

CM 1

CRN 512847-98-2 CMF C124 H204 N24 O60

Absolute stereochemistry.

PAGE 1-A

PAGE 2-A

PAGE 3-A

PAGE 3-B

CM

CRN 768-95-6 CMF C10 H16 0

REFERENCE COUNT:

THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 28 OF 61 CAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: DOCUMENT NUMBER: TITLE:

2002:537097 CAPLUS Synthesis of new carnosine derivatives of $\beta {\color{red} {\bf cyclodextrin}}$ and their hydroxyl radical scavenger ability

AUTHOR(S): CORPORATE SOURCE:

La Mendola, Diego; Sortino, Salvatore; Vecchio, Graziella; Rizzarelli, Enrico Dipartimento di Scienze Chimiche, Universita di Catania, Catania, I-95125, Italy Helvetica Chimica Acta (2002), 85(6), 1633-1643

CODEN: HCACAV; ISSN: 0018-019X Verlag Helvetica Chimica Acta

DOCUMENT TYPE:

LANGUAGE:

CASREACT 137:295212

Several in vitro and in vivo studies have suggested that carnosine can act as a scavenger of reactive oxygen species and intracellular proton buffer. On the other hand, carnosinase is a specific peptidase able to destroy the biol. active dipeptide. To overcome this constraint, β -

cyclodextrin (β-CD) was functionalized with carnosine to give

the following new compds.: 6A-[(3-{[(18)-1-carboxy-2-(1H-imidazol-4-

yl)ethyl]amino}-3-oxopropyl)amino]-6A-deoxy-β- cyclodextrin

(1), 6A-[(β-alanyl-L-histidyl)amino]-β- cyclodextrin (2), and (2AS, 3AR) -3A-[(3-{[(1S)-1-carboxy-2-(1H-imidazol-4-

yl]ethyl]amino}-3-oxopropyl)amino]-3A-deoxy- β - cyclodextrin (3). Pulse-radiolysis investigation showed that the β -CD derivs. 1-3 are excellent scavengers of OH. radicals. Their activity is not

only due to the formation of the stable imidazole-centered radical, but also to the scavenger ability of the glucose moieties of the macrocycle. This effect is independent of the disposition of the imidazole ring. In fact, the quenching constant values are similar for the three compds.

393100-96-4P

RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation) (preparation and hydroxyl radical scavenging activity of carnosine derivs.

of β- cyclodextrin RN 393100-96-4

L-Histidine, N-(6A-deoxy- β -cyclodextrin-6A-yl)- β -alanyl- (CA INDEX NAME)

Absolute stereochemistry.

THERE ARE 58 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 29 OF 61 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2002:517607 CAPLUS

DOCUMENT NUMBER:

Diastereomeric dipeptide derivatives possessing

terminal host and quest groups

AUTHOR(S): Nonomura, Tsutomu; Tanaka, Tomohiko; Yamamura, Hatsuo;

Araki, Shuki; Kawai, Masao

CORPORATE SOURCE: Department of Applied Chemistry, Nagoya Institute of

Technology, Nagoya, 466-8555, Japan

Peptide Science (2002), Volume Date 2001, 38th, SOURCE:

CODEN: PSCIFQ; ISSN: 1344-7661

PUBLISHER: Japanese Peptide Society

DOCUMENT TYPE: LANGUAGE: English

AB A symposium report. Diastereomeric dialanyl peptides containing B-

cyclodextrin (CyD-OH) and 1-adamantyl (Adm) moieties, namely Adm-CO-L/D-Ala-L/D-Ala-NH-CyD and CyD-SCH2CO-L/D-Ala-L/D-Ala-NH-Adm, were

prepared Large chemical shift differences between the diastereotopic .vdelta.-CH2 protons of Adm group indicated strong interterminal host-guest interaction in these diastereomeric dipeptides. External

quest-induced conformational change of the latter peptides was suggested by the 1H NMR spectral change caused by the addition of Adm-CO2Na in D2O. 501699-57-6P 501699-58-7P 501699-59-8P

501699-60-1P

(Properties); SPN (Synthetic preparation); PREP (Preparation) (preparation and proton NMR of diastereomeric dialanine derivs. having $\beta \underline{cyclodextrin}$ and adamantyl terminal host and guest

groups) 501699-57-6 CAPLUS RN

β-Cyclodextrin, 6A-deoxy-6A-[[N-(tricyclo[3.3.1.13,7]dec-1-

ylcarbonyl)-L-alanyl-L-alanyl]amino]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

Absolute stereochemistry.

 $\beta\text{-Cyclodextrin}, 6\text{A-deoxy-6A-[[N-(tricyclo[3.3.1.13,7]dec-l-ylcarbonyl)-D-alanyl-L-alanyl]amino]- (9CI) (CA INDEX NAME)$

PAGE 2-A

PAGE 1-A

Absolute stereochemistry.

501699-58-7 CAPLUS B-Cyclodextrin, 6A-deoxy-6A-[[N-(tricyclo[3.3.1.13,7]dec-1-ylcarbonyl)-L-alanyl-D-alanyl]amino]- (9GI) (CA INDEX NAME) ${\rm RN}$

PAGE 1-A

PAGE 2-A

RN

501699-60-1 CAPLUS p-Cyclodextrin, 6A-deoxy-6A-[[N-(tricyclo[3.3.1.13,7]dec-1-ylcarbonyl]-D-alanyl-D-alanyl]amino[- (9GI) (CA INDEX NAME)

Absolute stereochemistry.

REFERENCE COUNT: THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 30 OF 61 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2002:452099 CAPLUS DOCUMENT NUMBER: 137:263244

(Ethylenediaminetetraacetic acid) cerium(IV)

[CeIV(EDTA)] complexes with dual hydrophobic binding sites as highly efficient catalysts for the hydrolysis of phosphodiesters

Yan, Jia-Ming; Atsumi, Masato; Yuan, De-Qi; Fujita, AUTHOR(S):

Kahee CORPORATE SOURCE: Faculty of Pharmaceutical Sciences, Nagasaki

University, Nagasaki, 852-8521, Japan

Helvetica Chimica Acta (2002), 85(5), 1496-1504

CODEN: HCACAV; ISSN: 0018-019X PUBLISHER: Verlag Helvetica Chimica Acta

DOCUMENT TYPE: Journal

LANGUAGE: English OTHER SOURCE(S):

CASREACT 137:263244

 $\beta-$ Cyclodextrin $(\beta-\text{CD})$ derivs, with an amino group at C(6). C(3), or C(2) were homogeneously linked together by an EDTA bridge to give dual cavity dimers (1). Coordination of the linker to metal ions and cooperation of the dual cavities of I in binding hydrophobic guests were properly demonstrated by NMR techniques and a fluorescence-based titration method, resp. The hydrolysis of bis(4-nitrophenyl) phosphate (BNPP) in the presence of CeIV complexes of β -CD dimers I was tens of millionfold faster than that in the absence of the CeIV complexes. Hydrophobic binding of the β -CD cavities was estimated to contribute to

the catalysis by a factor of up to 520, and the type of modified sugar unit and the bridging positions influenced this cooperation between the β-CD moleties and the catalytic metal center.

Page 18 August - Art - A

aminocycloheptasaccharides capable of forming complexes with cerium ions)

432023-87-5 CAPLUS

CN β-Cyclodextrin, 6A,6'A-[1,2-ethanediylbis[[(carboxymethyl)imino](1oxo-2,1-ethanediyl)imino]]bis[6A-deoxy- (CA INDEX NAME)

PAGE 1-A

PAGE 2-A

PAGE 3-A

IT $\frac{432023-87-5DP}{462121-23-9P}$, cerium complex containing $\frac{462121-22-8P}{462121-23-9P}$

RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation) (preparation of as catalysts for the hydrolysis of phosphodiesters) 432023-87-5 CAPLUS

RN 432023-87-5 CAPLUS
CN B-Cyclodextrin, 6A,6'A-[1,2-ethanediylbis[[(carboxymethyl)imino](1-oxo-2,1-ethanediyl)imino]]bis[6A-deoxy- (CA INDEX NAME)

PAGE 1-A

PAGE 2-A

PAGE 3-A

RN 462121-22-8 CAPLUS

β-Cyclodextrin, 6A,6'A-[1,2-ethanediylbis[[(carboxymethyl)imino](1-

oxo-Z, 1-ethanediyliminoj]bis[6A-deoxy-, compd. with 6-[[4-[(4-minophenyl)methyl]phenyl]minoj-Z-naphthalenesulfonic acid monosodium salt (1:1) [9C1] (CA INDEX NAME)

CRN 462121-21-7

CMF C23 H20 N2 O3 S . Na

CM

CRN 432023-87-5

CMF C94 H154 N4 O74

PAGE 2-A

PAGE 3-A

RN

CN

462121-23-9 CAPLUS Glyoine, N,N-1,2-ethanediylbis[N-[2-[(6A-deoxy- β -cyclodextrin-6A-yl]amino]-2-coxeethyl]-, compd. with 6,6'-[methylenebis(4,1-phenylenehimino)]bis[2-naphthalenesulfonic acid] disodium salt (1:1) (901) (CA INDEX NAME)

CM 1

CRN 432023-87-5 CMF C94 H154 N4 074

PAGE 1-A

PAGE 2-A

PAGE 3-A

CM

CRN 152310-62-8 CMF C33 H26 N2 O6 S2 . 2 Na

2 Na

THERE ARE 28 CITED REFERENCES AVAILABLE FOR THIS REFERENCE COUNT: RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 31 OF 61 CAPLUS COPYRIGHT 2009 ACS on STN 2002:219695 CAPLUS

ACCESSION NUMBER: DOCUMENT NUMBER:

The first successful investigation into a

cyclodextrin-based enzyme model as an

efficient catalyst for luminol chemiluminescent

AUTHOR(S):

Yuan, De-Qi; Lu, Jianzhong; Atsumi, Masato; Izuka, Ayako; Kai, Masaaki; Fujita, Kahee

Faculty of Pharmaceutical Sciences, Nagasaki CORPORATE SOURCE:

University, Nagasaki, 852-8521, Japan Chemical Communications (Cambridge, United Kingdom)

(2002), (7), 730-731 CODEN: CHCOFS; ISSN: 1359-7345

Royal Society of Chemistry

DOCUMENT TYPE:

LANGUAGE: English The chemiluminescence of the luminol-H2O2 system is found for the first AΒ

time to be remarkably enhanced by the Ce(iv) complexes of

cyclodextrin dimers.

432023-87-5P 432023-89-7P RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(cyclodextrin-based enzyme model as efficient catalyst for luminol chemiluminescent reaction) 432023-87-5 CAPLUS

β-Cyclodextrin, 6A,6'A-[1,2-ethanediylbis[[(carboxymethyl)imino](1oxo-2,1-ethanediyl)imino]]bis[6A-deoxy- (CA INDEX NAME)

PAGE 2-A

PAGE 3-A

432023-89-7 CAPLUS

β-Cyclodextrin, 6A,6'A-[1,2-ethanediylbis[[(carboxymethyl)imino](1-

oxo-2,1-ethanediyl)imino]]bis[6A-deoxy-

2A, 2B, 2C, 2D, 2E, 2F, 2G, 3A, 3B, 3C, 3D, 3E, 3F, 3G, 6B, 6C, 6D, 6E, 6F, 6G-eicosa-Omethyl- (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

REFERENCE COUNT: THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 32 OF 61 CAPLUS COPYRIGHT 2009 ACS on STN

2002:108042 CAPLUS ACCESSION NUMBER: DOCUMENT NUMBER: 136:340978

Double naphthalene-tagged cyclodextrin

-peptide capable of exhibiting quest-induced naphthalene excimer fluorescence

AUTHOR(S): Yana, Dewi; Shimizu, Tomoko; Hamasaki, Keita; Mihara,

Hisakazu; Ueno, Akihiko

CORPORATE SOURCE: Department of Bioengineering, Graduate School of

Bioscience and Biotechnology, Tokyo Institute of Technology, Yokohama, 226-8501, Japan

Macromolecular Rapid Communications (2002), 23(1), SOURCE:

CODEN: MRCOE3; ISSN: 1022-1336

Wiley-VCH Verlag GmbH

LANGUAGE: English

A cyclodextrin-peptide hybrid (17NNβ) bearing two

naphthalene units in the peptide side chain has been designed and synthesized as a novel chemosensor mol. CD study of the compound revealed that the peptide has a-helix structure with a helix content of 41%.

The peptide revealed both monomer and excimer emission and the intensity

of the exciner emission increased while that of the monomer emission decreased upon addition of the guest compound This behavior was observed for various guest mole., suggesting that the system can be used for detecting mole. in agreeous solution

18769-91-2 18769-94-5 18769-97-8 18769-97-8 18769-98-9

RL: PRP (Properties)

(preparation of naphthalene- and cyclodextrin-substituted peptide for use as fluorescent chemosensor mol.)

RN 418769-91-2 CAPLUS
CN Cholan-24-oic acid, 3,7-dihydroxy-, (3α,5β,7β)-, compd.
with N-acetyl-L-alanyl-b-α-glutamyl-L-alanyl-NG-(2naphthalenylacetyl)-b-lysyl-b-alanyl-b-α-glutamyl-NG-(2-

naphthalenylacetyl)-b-1ysyl-b-alanyl-b-1-ysyl-b-a-glutamyl-Ne-(2naphthalenylacetyl)-b-1ysyl-b-alanyl-b-lanyl-b-1ysyl-b-aglutamyl-balanyl-b-alanyl-N-(6A-deoxy #-eyolodoxtrin-6A-yl)-b-glutaminyl-b-1ysyl-b-alaninamide (1:1) (9:1) (6A INDEX NAME)

CM 1

CRN 418769-90-1

CMF C142 H218 N24 061
Absolute stereochemistry.



PAGE 2-B

PAGE 3-C

CM 2

CRN 128-13-2 CMF C24 H40 O4

Absolute stereochemistry.

RN CN

418769-92-3 CAPLUS
Cholan-24-oic acid, 3,7-dihydroxy-, (3a,5\$,7a)-, compd.
with N-acety-L-alanyl-L-a-glutamyl-L-alanyl-N6-(2-naphthalenylacety)!-L-lysyl-L-alanyl-L-lysyl-L-a-glutamyl-N6-(2-naphthalenylacety)!-L-lysyl-L-alanyl-L-alanyl-L-ysyl-L-a-glutamyl-L-alanyl-L-lysyl-L-alanyl-L-lysyl-L-alanyl-L-lysyl-L-alanyl-L-lysyl-L-alanyl-L-lysyl-L-alanyl-L-lysyl-L-alanyl-N6-(8-deoxy-B-cyclodextrin-6A-yl)-L-glutaminyl-L-lysyl-L-alaniamind(e1)| 901| (3 NDEX NAME)

CM 1

CRN 418769-90-1 CMF C142 H218 N24 O61

Absolute stereochemistry.

PAGE 2-B



PAGE 2-C



PAGE 3-C

.

CM

CRN 474-25-9 CMF C24 H40 O4

Absolute stereochemistry.

RN 418769-93-4 CAPLUS

- CN Cholan-24-ous acid, 3-hydroxy-, (3a, 50)-, compd. with W-acetyl-L-alanyl-L-a-gulurayl-h-alanyl-Mc(2-maphthalenylacetyl)-Liyyl-i-alanyl-i-[ysyl-i-a-glutamyl-Mc(2-maphthalenylacetyl)-Liyyl-i-alanyl-i-[sanyl-i-syl-i-a-gulurayl-i-l-alanyl-i-alanyl-Mc(A-deoxy-B-oyclodextrin-6A-yl)-L-glutaminyl-i-l-syl-i-alanyl-i-alanyl-Mc(A-deoxy-B-oyclodextrin-6A-yl)-L-glutaminyl-i-lysyl-i-alaninamide (1:1) (901) (GA INDEX NASCA)
 - CM 1

CRN 418769-90-1 CMF C142 H218 N24 061

Absolute stereochemistry.

PAGE 2-B



PAGE 2-C



PAGE 3-C

3,

CM

CRN 434-13-9 CMF C24 H40 O3

Absolute stereochemistry.

RN 418769-94-5 CAPLUS

CN Cholan-24-out acid, 3,6-dihydroxy-, (3α,9h,6α)-, compd. with N-acetyl-r-langul-1-ac-glutamyl-al-angul-1N-6(-2-naphthalenylacetyl)-1--lysyl-1-alanyl-1-1-ysyl-1-α-glutamyl-N6-(2-naphthalenylacetyl)-1--lysyl-1-alanyl-1-1-angul-1--l-agul-1-a-glutamyl-1-alanyl-N-(6λ-deoxy-β-cyclodextrin-6λ-yl)-1--glutaminyl-1-ysyl-1-alaninanide (1:1) (9(1) (CA INDEX NAME)

CM 1

CRN 418769-90-1 CMF C142 H218 N24 061

Absolute stereochemistry.

PAGE 2-B



PAGE 2-C



8.

CM

CRN 83-49-8 CMF C24 H40 O4

Absolute stereochemistry.

PAGE 3-C

418769-95-6 CAPLUS

CN L-Alaninamide, N-acetyl-L-calanyl-L-ca-glutamyl-Mc-(2naphthalenylacetyl-1-l-ysyl-1-alanyl-L-ysyl-1-a-glutamyl-Mc-(2naphthalenylacetyl)-1-l-ysyl-1-alanyl-1-alanyl-1-a-glutamyl-Mc-(2naphthalenylacetyl)-1-l-ysyl-1-alanyl-1-alanyl-1-glutaminyl-1ysyl-1-alanyl-N-(6A-deoxy-B-cyclodextrin-6A-yl)-1-glutaminyl-1ysyl-1-compd. with tricyclo(3,3,1,13,7)decan-1-ol (11) (9CI) (CA INDEX MANUS)

CM 1

CRN 418769-90-1 CMF C142 H218 N24 O61

Absolute stereochemistry.

PAGE 2-B



PAGE 2-C



PAGE 3-C

CM

CRN 768-95-6 CMF C10 H16 0

418769-96-7 CAPLUS RN

CM 1

CRN 418769-90-1 CMF C142 H218 N24 061

Absolute stereochemistry.

PAGE 2-B



PAGE 2-C



10576346

PAGE 3-C

S.,

CM

CRN 700-57-2 CMF C10 H16 0

HO

RN 418769-97-8 CAPLUS

418 (ber 7 me decline syl-1-mlany)-1-m a_njutamy1-l-mlany)-1-mlany

CM 1

CRN 418769-90-1 CMF C142 H218 N24 061

Absolute stereochemistry.

PAGE 2-B



PAGE 2-C



PAGE 3-C

CM

CRN 464-45-9 CMF C10 H18 O

Absolute stereochemistry. Rotation (-).

- RN
- 418769-98-9 CAPLUS
 L-Alaninamide, N-acetyl-L-alanyl-L-a-glutamyl-L-alanyl-N6-(2-naphthalenyl-acetyl)-L-lysyl-L-alanyl-L-lysyl-L-a-glutamyl-N6-(2-naphthalenyl-acetyl)-L-lysyl-L-alanyl-L-alanyl-L-alanyl-L-a-glutamyl-N6-(2-naphthalenyl-acetyl-L-L-ysyl-L-alanyl-L-alanyl-L-l-lysyl-L-a-glutamyl-L-alanyl-L CN

lysyl-, compd. with (1R,2S,4R)-1,7,7-trimethylbicyclo[2.2.1]heptan-2-o1 (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 418769-90-1 CMF C142 H218 N24 061

Absolute stereochemistry.

PAGE 2-B



PAGE 2-C



PAGE 3-C

CM

CRN 464-43-7 CMF C10 H18 0

Absolute stereochemistry. Rotation (+).

418769-90-1
RR: PRP (Properties); RCT (Reactant); RACT (Reactant or reagent)
[preparation of naphthalene- and <u>oyolodextrin</u>-substituted peptide
for use as fluorescent chemosensor mol.)
418769-90-1 CAPLUS

CN L-Alaninamide, N-acetyl-L-alanyl-L-α-glutamyl-L-alanyl-M6-(2-naphthalenylacetyl)-L-lysyl-L-alanyl-L-1ysyl-L-α-glutamyl-N6-(2-naphthalenylacetyl)-L-lysyl-L-alanyl-L-alanyl-L-alanyl-M6-(2-naphthalenylacetyl)-L-glystl-α-glutamyl-L-alanyl-L-alanyl-N-(6A-deoxy-β-cyclodextrin-6A-yl)-L-glutaminyl-L-lysyl-Q-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 2-B



PAGE 2-C



REFERENCE COUNT:

THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

PAGE 3-C

26 L8 ANSWER 33 OF 61 CAPLUS COPYRIGHT 2009 ACS on SIN

ACCESSION NUMBER: 2002:87200 CAPLUS DOCUMENT NUMBER: 136:135028

Carnosine $\underline{\textbf{cyclodextrin}}$ derivatives as antioxidants

INVENTOR(S): Rizzarelli, Enrico; Vecchio, Graziella; La Mendola,

Diego PATENT ASSIGNEE(S):

Universita' Degli Studi di Catania, Italy Eur. Pat. Appl., 7 pp. SOURCE:

CODEN: EPXXDW

DOCUMENT TYPE: Patent

English

LANGUAGE: FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1176154	A1	20020130	EP 2001-117259	20010717
EP 1176154	B1	20050629		

AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO

A1 IT 2000-MI1696 AT 298767 AT 2001-117259 ES 2001-117259 PRIORITY APPLN. INFO.: IT 2000-MI1696

Compds. obtained by functionalizing $\beta \underline{cyclodextrin}$ at the

3- or 6-positions with carnosine (β -alanylhistidine) have marked antioxidant (radical scavenger) activity, in particular, anticataract activity. E.g., I was prepared

393100-96-4P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(carnosine $\underline{\text{cyclodextrin}}$ derivs. as antioxidants) 393100-96-4 CAPLUS

L-Histidine, N-(6A-deoxy- β -cyclodextrin-6A-yl)- β -alanyl- (CA INDEX NAME)

Absolute stereochemistry.

THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 34 OF 61 CAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 2001:843415 CAPLUS DOCUMENT NUMBER:

10576346

A method for highly efficient chemiluminescence of

imidazopyrazinone in water

Teranishi, K. Faculty of Bioresources, Mie University, Mie,

CORPORATE SOURCE:

Bioluminescence & Chemiluminescence, Proceedings of the International Symposium, 11th, Pacific Grove, CA, United States, Sept. 6-10, 2000 (2001), Meeting Date

2000, 247-250. Editor(s): Case, James F. World Scientific Publishing Co. Pte. Ltd.: Singapore,

CODEN: 69CAFI DOCUMENT TYPE: Conference

LANGUAGE: English

OTHER SOURCE(S): CASREACT 136:354915

The chemiluminescence of 2-methyl-6-(p-methoxyphenyl)imidazo[1,2-a]pyrazin-

3(7H)-one (MLCA) covalently bound to a single **cyclodextrin** mol. was effectively enhanced in an aqueous solvent. To study the influence of distance between MCLA and the <u>cyclodextrins</u>, glycine spacers were introduced between MCLA and the <u>cyclodextrins</u>. The chemiltuminescence efficiency of the oxygen-induced chemiltuminescence in

phosphate buffer was significantly dependent on the kind of bound

cyclodextrin, the binding site of chromophore and

cyclodextrin, and the length of spacer between the chromophore and

cyclodextrin. The light-emitting efficiency of the cyclodextrin-bound MCLA compound in which y-

cyclodextrin was covalently attached with a short spacer exhibited

high enhancement. This study showed that the strategy involving covalently attaching a light-producing chromophore onto a

cyclodextrin for the enhancement of chemiluminescence was more efficient than the use of an aqueous solution containing very large amts. of

cyclodextrin. 261736-14-5P

RL: ARG (Analytical reagent use); RCT (Reactant); SPN (Synthetic preparation); ANST (Analytical study); PREP (Preparation); RACT (Reactant

or reagent); USES (Uses) (enhanced oxygen-induced chemiluminescence of MCLA covalently bound to

cyclodextrins) 261736-14-5 CAPLUS

γ-Cyclodextrin, 6A-deoxy-6A-[[[N-[3-[3,7-dihydro-6-(4-methoxyphenyl]-3-oxoimidazo[1,2-a]pyrazin-2-yl]-1-oxopropyl]glycyl]glycyl]amino]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-C

PAGE 2-A

PAGE 2-B

ОН

PAGE 2-C

L

REFERENCE COUNT:

THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD, ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 35 OF 61 CAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 2001:615116 CAPLUS DOCUMENT NUMBER: 135:344649

TITLE: Synthesis and binding properties of <u>cyclodextrin</u> trimers

AUTHOR(S): Leung, D. K.; Atkins, J. H.; Breslow, R. CORPORATE SOURCE: Department of Chemistry, Columbia University, New York, NY, 10027, USA
SOURCE: Tetrahedron Letters (2001), 42(36), 6255-6258
CODEN: TELEAY, ISSN: 0040-4039

```
PUBLISHER:
                         Elsevier Science Ltd.
DOCUMENT TYPE:
LANGUAGE:
                         English
                         CASREACT 135:344649
    A series of cyclodextrin trimers and dimers were prepared and
     examined as binders for appropriate trimeric and dimeric amino acid amides.
     Tritopic binding was stronger than ditopic binding, although the free
     energies were not strictly additive. Such trimers are attractive
     prospects for the binding of polypeptides and proteins.
     371162-07-1P
     RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
        (synthesis and binding properties of cyclodextrin trimers
        with trimeric and dimeric amino acid amides)
     371162-07-1 CAPLUS
     L-Phenylalanine, N,N',N''-(1,3,5-benzenetriyltricarbonyl)tris[4-(1,1-
     dimethylethyl)-, compd. with 6A,6'A,6'A-[nitrilotris[(1-oxo-2,1-
     ethanediyl)imino]]tris[6A-deoxy-β-cyclodextrin] (1:1) (9CI) (CA
     INDEX NAME)
     CM
     CRN 371161-92-1
     CMF C48 H57 N3 O9
Absolute stereochemistry.
     CRN 371161-86-3
     CMF C132 H216 N4 0105
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
     RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
     (Reactant or reagent)
        (synthesis and binding properties of cyclodextrin trimers
        with trimeric and dimeric amino acid amides)
RN
     371161-86-3 CAPLUS
     B-Cyclodextrin, 6A,6'A,6'A-[nitrilotris](1-oxo-2,1-
     ethanedryl)imino]]tris[6A-deoxy- (9CI) (CA INDEX NAME)
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
                               THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS
REFERENCE COUNT:
                               RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT
L8 ANSWER 36 OF 61 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER:
                         2001:504890 CAPLUS
DOCUMENT NUMBER:
                         Cyclodextrin-peptide hybrid (CD-peptide) 1
                         synthesis and properties of (a-helix peptides
                         bearing \gamma- cyclodextrin and pyrene in
                         their side chains
                         Hossain, M. A.; Matsumura, S.; Kanai, T.; Hamasaki,
                         K.; Mihara, H.; Ueno, A.
CORPORATE SOURCE:
                         Department of Bioengineering, Graduate School of
                         Bioscience and Biotechnology, Tokyo Institute of
                         Technology, Yokohama, 226-8501, Japan
                         Cyclodextrin: From Basic Research to Market,
```

International Cyclodextrin Symposium, 10th, Ann Arbor,

10576346

MI, United States, May 21-24, 2000 (2000), 173-178. Wacker Biochem Corp.: Adrian, Mich.

CODEN: 69BFYD Conference: (computer optical disk)

DOCUMENT TYPE: Conferent LANGUAGE: English

A symposium report. Three **cyclodextrin**-peptide hybrids

(CD-peptides) bearing one of two pyrene units in the side chains have been prepared as novel outernal attimulant mol. responsive devices. These CD-peptides exhibited concentration dependency in the excimer emission as a result of discrization of the CD-peptides. The intensity of pyrene excimer emission decreased whereas that of monomer emission increased upon addition of guest mols. This result asymptotic dimer CD-peptides dissociated CD cavity. CD-peptides bind structurally similar steroid compds. with remarkable discrimination.

IT 270079-04-4P 296271-34-6P

Ri: PEF (Physical, engineering or chemical process); PRP (Properties); SPN (Synthetic preparation); PREP (Preparation); PROC (Process) (preparation and mol. recognition properties of helical peptides bearing y- oyclodatrin and pyrene in their side chains)

270079-04-4 CAPLUS

AN Z/00/3-04-6 CAPLOS

N L-Alaninanide, N-acetyl-L-alanyl-L-a-glutamyl-L-alanyl-L-alanyl-L-alanyl-L-alanyl-L-alanyl-L-a-glutamyl-L-alanyl-N-(6A-deoxy-Y-cyclodextrin-6A-yl)-L-glutamyl-L-alanyl-L-layyl-L-a-glutamyl-N6-(1-

cyclodextrin-6A-yl)-L-glutaminyl-L-alanyl-L-lysyl-L-\acqlutamyl-N6-[1-\oxo-4-(1-pyrenyl)butyl]-L-lysyl-L-alanyl-L-alanyl-L-lysyl- (9CI) (CA INDEX NAME)

PAGE 1-C

PAGE 2-A

PAGE 2-C

----- он

RN 296271-34-6 CAPLUS

N L-Alaninamide, N-acetyl-L-alanyl-L-α-glutamyl-L-alanyl-L-alanyl-N6-[1-oxo-4-(1-pyrenyl) butyl]-i-lysyl-L-1ysyl-L-α-glutamyl-L-alanyl-L-(6A-deoxy--oyol)deoxtrin-6A-yl)-I-glutaminyl-L-alanyl-L-ysyl-Lα-glutamyl-L-alanyl-L-alanyl-L-alanyl-L-lysyl- (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 1-B

PAGE 1-C

-- NH2

PAGE 2-C

___OH

ОН

__он

REFERENCE COUNT:

THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

1.8 ANSWER 37 OF 61 CAPLUS COPYRIGHT 2009 ACS on STN

2001:504885 CAPLUS

SOURCE:

Cyclodextrin peptide hybrid (CD-peptide) 2 photoresponsive α-helix peptide bearing an azobenzene and a β- **cyclodextrin** or a

AUTHOR(S): CORPORATE SOURCE: γ- cyclodextrin in their side chain Shimizu, T.; Hamasaki, K.; Mihara, H.; Ueno, A.

Department of Bioengineering, Graduate School of Bioscience and Biotechnology, Tokyo Institute of Technology, Yokohama, 226-8501, Japan Cyclodextrin: From Basic Research to Market,

International Cyclodextrin Symposium, 10th, Ann Arbor, MI, United States, May 21-24, 2000 (2000), 158-161. Wacker Biochem Corp.: Adrian, Mich. CODEN: 69BFYD

DOCUMENT TYPE: Conference; (computer optical disk) LANGUAGE: English

AΒ A symposium report. Cyclodextrin-peptide hybrids (CD-peptide) bearing an azobenzene and a β -CD or a γ -CD groups have been prepared CD spectroscopy revealed that the CD-peptide bearing y-CD increased the a-helix content associated with photoisomerization from trans to cis form of the azobenzene unit. While quest binding did not affect the α -helix content of the CD-peptides, the binding affinity for the guest mol. diminished remarkably by the UV irradiation

352031-34-6 352031-35-7 352031-36-8 352031-37-9

RL: FMU (Formation, unclassified); PRP (Properties); FORM (Formation, nonpreparative)

(binding of hyodeoxycholic acid by a helical peptide containing cyclodextrin and azobenzene groups on the side chain)

RN

352031-34-6 CAPLUS Cholan-24-oic acid, 3,6-dihydroxy-, (3 α ,5 β ,6 α)-, compd. with N-acetyl-L-alanyl-L-q-qlutamyl-L-alanyl-L-alanyl-N6-[4-[(1E)phenylazo]benzoyl]-L-lysyl-L-arginyl-L-α-glutamyl-L-alanyl-N-(6A- $\texttt{deoxy-}\beta - \texttt{cyclodextrin-}6A - \texttt{yl}) - \texttt{L-}\texttt{glutaminyl-}L - \texttt{alanyl-}L - \texttt{arginyl-}L - \alpha$ glutamyl-L-alanyl-L-alanyl-L-alanyl-L-arginyl-L-alaninamide (1:1) (9CI) (CA INDEX NAME)

CM

CRN 352031-30-2 CMF C128 H203 N31 060

Absolute stereochemistry. Double bond geometry as shown.

PAGE 2-B

PAGE 3-B

CM 2

CRN 83-49-8 CMF C24 H40 O4

Absolute stereochemistry.

RN 352031-35-7 CAPLUS

N Cholam-24-sis anid, 3,6-dihydroxy-, (3a,56,6a)-, compd, with N-acetyl-I-calanyl-I-d-raylutamyl-I-alanyl-I-alanyl-I-f-(4-([12]-phenylazo])enzoyl-I-l-lysyl-I-arginyl-I-a-glutamyl-I-alanyl-N-(6A-deoxy-B-cyl-dextrin-6A-yl-1-glutamiyl-I-arginyl-I-a-glutamyl-I-a-alanyl-I-a-q-glutamyl-I-alanyl-I-a-alanyl-I-a-alanyl-I-a-glutamyl-I-a-alanyl-I-alanyl-I-a-ala

24

CRN 352031-32-4 CMF C128 H203 N31 060

Absolute stereochemistry. Double bond geometry as shown.

PAGE 1-A

PAGE 3-A

PAGE 3-B

__CO2H

PAGE 4-B

CRN 83-49-8 CMF C24 H40 O4

RN 352031-36-8 CAPLUS

32c031-36-8 LAPLUS (Acitydroxy, Cap.58.6ul, compd. Cholan-48-viu acitydroxy, Cap.58.6ul, compd. Cholan-48-viu acitydroxy, Cap.58.6ul, compd. Cholan-48-viu acitydroxy, Cap.58.6ul, cap.58.

CM 1

CRN 352031-31-3

CMF C134 H213 N31 065

PAGE 1-A

PAGE 2-A

PAGE 3-A

CM

CRN 83-49-8 CMF C24 H40 O4

Absolute stereochemistry.

RN 352031-37-9 CAPLUS

Jobal 2-4-4-5-Maria 3,6-dishydroxy (Ma,5),601 , compd. with N-acety-licalaryi-l-acety-y-cyclodextrin-6-Ayll-1-quistmyi-l-alaryi-l-araryi-l-acetyi-l-alaryi-l

CM 1

CRN 352031-33-5

CMF C134 H213 N31 065

PAGE 1-A

10576346

PAGE 1-B

PAGE 2-A

PAGE 3-A

CM 2

CRN 83-49-8 CMF C24 H40 04

Absolute stereochemistry.

IT 352031-30-2P 352031-31-3P 352031-32-4P

352031-33-5P RL: PEP (Physical, engineering or chemical process); PRP (Properties); SPN

Au: Per (mysical, engineering of orental process) Pack (Projection), on (Synthetic preparation); PREP (Properation); PROC (Process) (preparation, photoisomerization and the helical content of a peptide bearing <u>cyolodextrim</u> and azobezene groups on the side chain)

RN 352031-90-2 CAPUIS

L-Alaninanide, N-aoctyl-L-alanyl-L-a-plutanyl-L-alanyl-L-alanyl-L-alanyl-No[4-([1E]-phenylazo|benzoyl]-l-lysyl-L-arginyl-L-a-glutanyl-L-alanyl-L-alanyl-L-alanyl-L-alanyl-L-arginyl-L-arginyl-L-arginyl-L-arginyl-L-arginyl-L-Alanyl-L-alanyl-L-alanyl-L-alanyl-L-Alanyl-L-alanyl-L

Absolute stereochemistry. Double bond geometry as shown.

PAGE 1-A

PAGE 2-B

20

PAGE 3-B

RN 352031-31-3 CAPLUS

35203;-3:-3: GAR:UNB
L-Alanimatida, N-acetyl-L-alanyl-L-arglutamyl-L-alanyl-L-alanyl-M6[4-([13]-phenylazo) benzoyl)-L-ysyl-L-arginyl-L-arglutamyl-L-alanyl-LN-(GA-dcoxy--cyolodextrin-GA-yl)-L-glutaminyl-L-arglutamyl-L-arginyl-Larglutamyl-L-alanyl-L-alanyl-L-alanyl-L-arginyl(GA INDEX NAME) CN

PAGE 2-A

PAGE 3-A

RN 352031-32-4 CAPLUS

Absolute stereochemistry. Double bond geometry as shown.

PAGE 3-A

PAGE 3-B

~ Me

CO2H

PAGE 4-B

352031-33-5 CAPLUS RN CN

 $\label{eq:controller} \begin{array}{lll} \text{Garino} & \text{Garino} \\ \text{Lealinyl-L-alanyl-$ NAME)

PAGE 1-A

PAGE 1-B

PAGE 2-A

PAGE 3-B

~_N R

REFERENCE COUNT: 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 38 OF 61 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2001:489986 CAPLUS
DOCUMENT NUMBER: 135:189416 diminishment in fluorescence quenching
and molecule sensing ability of a novel
cyclodextrin-peptide conjugate
AUTHOR(8): Hossain, Mohammed Abther; Hamasaki, Keita; Takahashi,

Keiko; Mihara, Hisakazu; Ueno, Akihiko

CORPORATE SOURCE: Department of Biosenjaneering Graduate School of

Bioseience and Biotechnology, Tokyo Institute of

Technology, Midori, Yokohama, 226-8501, Japan

SOURCE: Journal of the American Chemical Society (2001),

123(30), 7435-7436

CODEN: JACSAT; ISSN: 0002-7863

American Chemical Society

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The authors have synthesized a novel CD-peptide hybrid (I) that has two different photoreactive moieties, pyrene (electron donor) and nitrobenzene (NN: electron acceptor) on the peptide scaffold. The authors report here, for the first time, how it works as a chemosemsor when both fluorophore

[syrene] and quencher (NB) are present in a **cyclodextrin**(CD)—conjugated peptide mol. To study the conformational change and mol. sensing ability of I, the authors also have synthesized three reference peptides, which have CD and NB units, pyrene and NB units and only one pyrene unit in the side chain of the peptides. The binding and

fluorescence properties of I and cholic acid and its derivs. were studied and discussed.

TT 355126-81-7P 355126-82-8P

RL: ARU (Analytical role, unclassified); NUU (Other use, unclassified); PRP (Properties); SPN (Synthetic preparation); ANST (Analytical study); PREP (Preparation); USES (Uses)

(guest-induced diminishment in fluorescence quenching and mol. sensing ability of a novel cyclodextrin-peptide conjugate)

RN 355126-81-7 CAPLUS

cyclodextrin-6A-yl)-L-glutaminyl-L-alanyl-L-alanyl-L-lysyl-L-\alpha-glutamyl-L-alanyl-L-alanyl-M6-[4-(4-nitrophenyl)-1-oxobutyl]-L-lysyl-L-lysyl-(9C1) (CA INDEX NAME)

PAGE 1-A

PAGE 4-A

PAGE 4-B

- RN 355126-82-8 CAPLUS
 - N L-Alaninamide, N-actyl-L-alanyl-L-α-glutamyl-L-alanyl-L-alanyl-L-alanyl-L-alanyl-L-alanyl-L-a-glutamyl-N-(6A-deoxy-β-cyclodextrin-6A-yl)-L-glutamyl-L-alanyl-L-yalanyl-L-yalanyl-L-yalanyl-L-yalanyl-L-yalanyl-L-yalanyl-L-yalanyl-L-yalanyl-N-alanyl-L-yalanyl-N-alanyl-L-yalanyl-N-al

PAGE 1-A

10576346

PAGE 2-B

PAGE 3-A

REFERENCE COUNT:

THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ACCESSION NUMBER: DOCUMENT NUMBER: TITLE:

L8 ANSWER 39 OF 61 CAPLUS COPYRIGHT 2009 ACS on STN 2001:332832 CAPLUS 135:116128

Immobilized fluorescent cyclodextrin on a cellulose membrane as a chemosensor for molecule detection

AUTHOR(S): Tanabe, Tetsuya; Touma, Kazuhiro; Hamasaki, Keita;

Ueno, Akihiko

Department of Bioengineering Graduate School of Bioscience and Biotechnology, Tokyo Institute of

Technology, Midori-ku Yokohama, 226-8501, Japan Analytical Chemistry (2001), 73(13), 3126-3130 SOURCE:

CODEN: ANCHAM: ISSN: 0003-2700

American Chemical Society PUBLISHER:

DOCUMENT TYPE:

LANGUAGE: English

Dansylglycine-modified $\underline{cyclodextrin}$ (DnsC4- β -CD) was prepared as a fluorescent host that is capable of being immobilized on a cellulose

membrane (DnsC4- β -CD membrane). DnsC4- β -CD immobilized on the cellulose membrane decreased its fluorescence intensity with increasing

concentration of quest mols., indicating that the host changes the location of the dansyl group from inside to outside the cyclodextrin cavity

upon quest accommodation, which is similar to DnsC4-B-CD in solution; thereby, the DnsC4- β -CD membrane is useful as a novel chemosensor for detecting mols. This result demonstrates that the cellulose membrane is useful as a practical supporting material for various chromophore-modified

cyclodextrins. 350033-77-1DP, reaction product with cellulose membrane (Analytical role, unclassified); DEV (Device component use); SPN (Synthetic preparation); ANST (Analytical study); PREP (Preparation); USES (Uses)

(immobilized fluorescent cyclodextrin on a cellulose membrane as a chemosensor for mol. detection;

350033-77-1 CAPLUS

β-Cyclodextrin, 6A-deoxy-6A-[[4-[[[[[5-(dimethylamino)-1naphthalenyl]sulfonyl]amino]acetyl]amino]butyl]amino]- (9CI) (CA INDEX NAMED

PAGE 1-A

PAGE 2-A

THERE ARE 27 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 40 OF 61 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2001:229965 CAPLUS

NMeg

DOCUMENT NUMBER:

Formation of superstructure composed of modified cyclodextrins as molecular "blocks" in aqueous

solution with host-quest complexation. Correlation of

chemical structure of modified group with complexation AUTHOR(S): Takahashi, Keiko; Imotani, Koichi; Kitsuta, Masahiko

CORPORATE SOURCE: Department of Applied Chemistry, Faculty of Engineering, Tokyo Institute of Polytechnics,

Kanagawa, 243-0297, Japan

SOURCE: Polymer Journal (Tokyo, Japan) (2001), 33(3), 242-247

CODEN: POLJB8; ISSN: 0032-3896

PUBLISHER: Society of Polymer Science, Japan

DOCUMENT TYPE:

English LANGUAGE:

OTHER SOURCE(S): CASREACT 135:19895

N'-tert-butoxycarbonyl monoamino acid-binding β - and α cyclodextrins (CDs) were prepared by DCC coupling. NMR study

suggests some of these novel modified CDs that act as host and quest to prefer "pseudo polymer" formation. The length of an arm between the N'-tert-butoxycarbonyl group and C6 position on the glucose ring was that of -NH-C α -CO-NH-. Modified β -CDs having longer arm form

intramol. rather than intermol. complexes. 342635-78-3P 342635-79-4P 342635-84-1P

342635-86-3P RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and host-guest complexation of amino acid-modified

cyclodextrins) 342635-78-3 CAPLUS RN

β-Cyclodextrin, 6A-deoxy-6A-[[N-[(1,1-

dimethylethoxy)carbonyl]glycylglycyl]amino]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 342635-79-4 CAPLUS
CN B-Cyclodextrin, 6A-deoxy-6A-[[N-[(1,1-dimethylethoxy)carbonyl]-L-phenylalanylglycyl]amino]- (9CI) (CA INDEX NAME)

PAGE 2-A

PAGE 1-A

RN 342635-84-1 CAPLUS

N 3±2653-84-1 CAPBUS
N β-Cyglodextrin, 6A-deoxy-6A-[[N-[(1,1-dimethylethoxy)carbonyl]glycylglycyl]amino]-, compd. with β-cyclodextrin (1:1) (9CI) (CA INDEX NAME)

M 1

CRN 342635-78-3 CMF C51 H85 N3 O38

PAGE 1-A

CM 2

CRN 7585-39-9 CMF C42 H70 O35

- 342635-86-3 CAPLUS RN
- 342035-86-3 CAPLUS $\beta\text{-Cyclodextrin, }6A\text{-deoxy-}6A\text{-}[N\text{-}[(1,1\text{-dimethylethoxy})\text{-carbonyl}]\text{-L-phenylalanylqlycyl]amino]-, compd. with }\beta\text{-cyclodextrin (1:1) (9CI) (CA INDEX NAME)}$ CN
 - CM
 - CRN 342635-79-4
 - CMF C58 H91 N3 O38

Absolute stereochemistry.

PAGE 1-A

CM 2

AUTHOR(S):

CRN 7585-39-9 CMF C42 H70 035

Absolute stereochemistry.

PAGE 1-A

REFERENCE COUNT: 33 THERE ARE 33 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 41 OF 61 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2001:184171 CAPLUS
DOCUMENT NUMBER: 134:326761
TITLE: Remarkable stabilization of the α-helix

Remarkable stabilization of the **c**-helix structure by an intramolecular host-guest bridge in a **cyclodextrin**-peptide hybrid Hamasaki, Keita; Suzuki, Ryosuke; Mihara, Hisakazu;

Ueno, Akihiko CORPORATE SOURCE:

Department of Bioengineering, Graduate School of Bioscience and Biotechnology, Tokyo Institute of

Technology, Yokohama, 226-8501, Japan

Macromolecular Rapid Communications (2001), 22(4),

262-265 CODEN: MRCOE3; ISSN: 1022-1336

Wiley-VCH Verlag GmbH

DOCUMENT TYPE:

LANGUAGE: English

A cyclodextrin-peptide hybrid (CD-peptide) bearing three

substituent units ($\gamma-$ cyclodextrin, cholic acid, and a dansyl fluorophore) in the side chain has been prepared. In this novel CD-peptide, the cholic acid unit acts as an internal guest and forms an intramol. inclusion complex with γ - cyclodextrin in the CD-peptide. This intramol. complex works as a host-guest bridge in the

CD-peptide and remarkably stabilizes the a-helix structure of the CD-peptide.

337307-99-0P 337308-00-6P 337308-01-7P

337308-02-8P

PRP (Properties); SPN (Synthetic preparation); PREP (Preparation) (preparation of an intramol. host-guest bridge in a cyclodextrin -peptide hybrid for stabilization of α-helix structure

337307-99-0 CAPLUS

Cholan-24-oic acid, 3,7-dihydroxy-, $(3\alpha,5\beta,7\alpha)$ -, compd. with N-acetyl-L-alanyl-L- α -glutamyl-L-alanyl-L-alanyl-N6-[[5-(dimethylamino)-1-naphthalenyl]sulfonyl]-L-lysyl-L-arginyl-L-α- $\verb|glutamyl-L-alanyl-N-(6A-deoxy-\gamma-cyclodextrin-6A-yl)-L-glutaminyl-L-|$ alanyl-L-arginyl-L-alanyl-L-q-glutamyl-L-alanyl-L-alanyl-L-lysyl-Larginyl-L-alaninamide (1:1) (9CI) (CA INDEX NAME)

CM

CRN 337307-97-8

CMF C139 H228 N32 O67 S

PAGE 1-A

10576346

PAGE 1-B

PAGE 1-C

CM

CRN 474-25-9 CMF C24 H40 O4

Absolute stereochemistry.



RN 337308-00-6 CAPLUS

CN

CM 1

CRN 337307-97-8

CMF C139 H228 N32 067 S

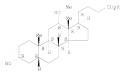
PAGE 1-B

PAGE 2-C

CM

CRN 83-44-3 CMF C24 H40 04

Absolute stereochemistry.



337308-01-7 CAPLUS RN CN

Cholan-24-oic scid, 3,6-dihydroxy-, (3\alpha,5\beta,6\alpha)-, compd. with N-acetyl-1-alanyl-1-a-glutamyl-1-alanyl-1-alanyl-1-alanyl-1-b-ayinyl-1-a

CM 1

CRN 337307-97-8 CMF C139 H228 N32 O67 S

PAGE 1-B

PAGE 2-C

CM 2

CRN 83-49-8 CMF C24 H40 04

Absolute stereochemistry.

RN 337308-02-8 CAPLUS CN Cholan-24-oic acid,

Cholan-24-oic acid, 3,7-dihydroxy-, (3a,58,78)-, compd. with N-accty-Li-alany-Li-ala

CM

CRN 337307-97-8

CMF C139 H228 N32 067 S

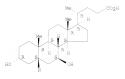
PAGE 1-B

PAGE 2-C

CM

CRN 128-13-2 CMF C24 H40 04

Absolute stereochemistry.



337307-97-8P RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of an intramol. host-guest bridge in a cyclodextrin -peptide hybrid for stabilization of α-helix structure)

337307-97-8 CAPLUS RN

CN L-Alaninamide, N-acetyl-L-alanyl-L-α-glutamyl-L-alanyl-L-alanyl-N6- $\hbox{\tt [[5-(dimethylamino)-l-naphthalenyl]sulfonyl]-L-lysyl-L-arginyl-L-}\alpha$ cics valuecusy.am.no)=1=napnnalenyl]sulfonyl]=L-lysyl=L-arginyl-L-aglutamyl-L-alanyl-N-(6A-deoxy-y-cyclodextrin-6A-yl)=L-glutaminyl-Lalanyl-L-arginyl-L-alanyl-L-alanyl-L-alanyl-L-alanyl-L-alanyl-L-lysyl-Larginyl- (9CI) (CA INDEX NAME)

PAGE 1-B

REFERENCE COUNT: THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 42 OF 61 CAPLUS COPYRIGHT 2009 ACS on STN 2000:842866 CAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER:

β- cyclodextrin for presentation of

bioactive peptides to molecular recognition AUTHOR(S): Schaschke, Norbert; Fiori, Stella; Musiol,

Hans-Jurgen; Assfalg-Machleidt, Irmgard; Machleidt, Werner; Escrieut, Chantal; Fourmy, Daniel; Muller, Gerhard; Moroder, Luis

CORPORATE SOURCE: Max-Planck-Institut fur Biochemie, Martinsried, D-82152, Germany

SOURCE:

Peptides: Biology and Chemistry, Proceedings of the Chinese Peptide Symposium, 5th, Lanzhou, China, July 14-17, 1998 (2000), Meeting Date 1998, 202-209. Editor(s): Hu, Xiao-Yu; Wang, Rui; Tam, James P.

Kluwer Academic Publishers: Dordrecht, Neth.

CODEN: 69AQX6 DOCUMENT TYPE: Conference

LANGUAGE: English

AB A symposium report. $\beta-$ <code>Cyclodextrin/gastrin</code> peptide conjugates were prepared and their binding affinities to the CCK-β/gastrin receptor were determined

211360-86-0P 211360-87-1P RL: BAC (Biological activity or effector, except adverse); BSU (Biological

study, unclassified); PRP (Properties); RCT (Reactant); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent)

 $(\beta - \frac{cyclodextrin}{c}$ for presentation of bioactive peptides to mol. recognition) 211360-86-0 CAPLUS

L-Phenylalaninamide, N-[4-[(6A-deoxy- β -cyclodextrin-6A-y1)amino]-1,4-dioxobuty1]-L-tryptophyl-L-norleucyl-L- α -asparty1- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 3-A

RN 211360-87-1 CAPLUS

L=Dool of Landon Carloon (Alloon Landon) = 1.4-[(6λ-deoxy-β-cyclodextrin-6λ-yl) amino]-1,4-dioxobutyl]-L-alanyl-L-tyrosylslycyl-L-tryptophyl-L-norleucyl-L-α-aspartyl- (9C1) (CA INDEX AME)

Absolute stereochemistry.

PAGE 3-A

PAGE 3-B

L8 ANSWER 43 OF 61 CAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 2000:605270 CAPLUS

DOCUMENT NUMBER:

Rate enhancement and enantioselectivity in ester

hydrolysis catalyzed by cyclodextrin-peptide

hybrids

AUTHOR(S): Tsutsumi, Hiroshi; Hamasaki, Keita; Mihara, Hisakazu;

Ueno, Akihiko

CORPORATE SOURCE: Midori-ku, Graduate School of Bioscience and

Biotechnology, Department of Bioengineering, Tokyo Institute of Technology, Yokohama, 226-8501, Japan Perkin 2 (2000), (9), 1813-1818

SOURCE:

CODEN: PRKTFO; ISSN: 1470-1820 Royal Society of Chemistry

DOCUMENT TYPE:

LANGUAGE: English

A pair of cyclodextrin-peptide hybrids (CD-peptides) having

three functional groups, β - cyclodextrin (β -CD), imidazole and carboxylate, in this order and in the reverse order, were designed and synthesized as hydrolytic catalysts. These CD-peptides were

designed so as to make three functional groups placed on the same side of the α -helix peptide work together. Another pair of CD-peptide hybrids which lack the carboxylate were also designed and synthesized in

order to examine the effect of the carboxylate in the novel catalysts. CD studies revealed that these CD-peptides have stable a-helix

structures and their a-helix contents were high enough (around 70%) to place the functional groups at appropriate positions in the

CD-peptides. Boc-D-alanine p-nitrophenyl ester and Boc-L-alanine p-nitrophenyl ester were chosen as substrates and the enantioselectivity of the catalysts in the hydrolysis was examined Kinetic studies suggested that the presence of carboxylate in the CD-peptides enhances the ester hydrolysis with substrate selectivity.

283174-31-2P 283174-32-3P 308803-69-2P 308803-70-5P

(Catalyst use); PRP (Properties); SPN (Synthetic preparation);

PREP (Preparation); USES (Uses) (rate enhancement and enantioselectivity in amino acid ester hydrolysis

catalyzed by synthetic **cyclodextrin**-peptide hybrids) RN 283174-31-2 CAPLUS

L-Alaninamide, N-acetyl-L-alanyl-L-alanyl-L-alanyl-L-α-glutamyl-Lalanyl-L-a-glutamyl-L-alanyl-L-arginyl-L-alanyl-L-histidyl-L-alanyl-L-α-glutamyl-L-alanyl-N-(6A-deoxy-β-cyclodextrin-6A-yl)-Lglutaminyl-L-alanyl-L-arginyl-L-alanyl-L-alanyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

283174-32-3 CAPLUS
L-Alaninamida, N-acetyl-L-alanyl-L-ala CN

Absolute stereochemistry.

PAGE 1-A

PAGE 2-A

H2N-__

PAGE 3-B

- RN 308803-69-2 CAPLUS
- Name of the state of the state

Absolute stereochemistry.

PAGE 1-A

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

PAGE 2-B

PAGE 2-C

RN 308803-70-5 CAPLUS

RM 30803-10-0 CARDOS (CARDOS CARDOS CARDOS CARDOS (CARDOS L-Alaninamido, N-acetyl-L-alany

Absolute stereochemistry.

PAGE 1-A

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

PAGE 3-A

REFERENCE COUNT:

THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 44 OF 61 CAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 2000:426677 CAPLUS

DOCUMENT NUMBER: 133:267113

Association of α-helix peptides that have

γ- cyclodextrin and pyrene units in their side chain, and induction of dissociation of the association dimer by external stimulant molecules

AUTHOR(S): Hossain, Mohammed Akhter; Matsumura, Sachiko; Kanai, Takuya; Hamasaki, Keita; Mihara, Hisakazu; Ueno,

Akihiko CORPORATE SOURCE: Faculty of Bioscience and Biotechnology, Department of

Bioengineering, Tokyo Institute of Technology,

Yokohama, 226-8501, Japan Perkin 2 (2000), (7), 1527-1533 CODEN: PRKTFO; ISSN: 1470-1820 SOURCE:

PUBLISHER: Royal Society of Chemistry DOCUMENT TYPE: Journal LANGUAGE:

English AB

 $\alpha-\text{Helical}$ peptides bearing one unit of $\gamma \underline{\text{cyclodextrin}}$ $(\gamma - CD)$, and one or two units of pyrene in their side chain have been

designed and synthesized as a novel system of peptide dimerization. The dimer was formed based on inclusion of two pyrene units in the γ cyclodextrin cavity, and the dissociation of the peptide dimer was induced by external stimulant mols. (quests). CD studies showed that the cyclodextrin-peptide hybrids (CD-peptides) maintain relatively

rich α-helix content (61 to 81%), which was not affected by the guest inclusion into the cyclodextrin cavity. Fluorescence studies revealed that these CD-peptides form stable association dimers, which exhibit excimer emission. The intensity of the pyrene excimer emission decreased upon addition of the guest mols., indicating dissociation of the CD-peptide dimers to the monomer CD-peptides. These CD-peptide hybrids bind structurally similar steroidal compds. with remarkable discrimination. These results demonstrate that this mol.-assembly system,

based on host-guest chemical, could be applicable to the development of mol.-responsive materials or a mol.-sensing system.

296271-37-9 296271-40-4 296271-41-5 296271-42-6

296271-43-7 296271-44-8
RL: FMU (Formation, unclassified); PRP (Properties); FORM (Formation, nonpreparative)

(binding of steroids by helical peptides containing ycyclodextrin and pyrene units in their side chain)

Cholan-24-oic acid, 3,7-dihydroxy-, $(3\alpha,5\beta,7\alpha)$ -, compd. with N-acetyl-L-alanyl-L-α-quutamyl-L-alanyl-L-alanyl-N6-[1-oxo-4-(1pyrenyl)butyl]-L-lysyl-L-lysyl-L- α -glutamyl-L-alanyl-N-(6A-deoxy- γ -cyclodextrin-6A-yl)-L-glutaminyl-L-alanyl-L-lysyl-L- α glutamyl-L-alanyl-L-alanyl-L-alanyl-L-lysyl-L-alaninamide (1:1) (9CI) (CA

CM 1

CRN 296271-34-6 CMF C141 H219 N23 O65

PAGE 1-A

HO2C Me H (CH2)4 NH2 Me (CH2)4 NH2

ОН

PAGE 1-C

__NH2

CM 2

CRN 474-25-9 CMF C24 H40 04

Absolute stereochemistry.



RN 296271-38-0 CAPLUS

2902/1-38-0-URLUS 3,12-dibydroxy-, (3a,58,12a)-, compd.

follan-2-de-1, action 3,12-dibydroxy-, (3a,58,12a)-, compd.

follan-2-de-1, action 1-a-guitamy-1-alanyl-1-alanyl-1-alanyl-1-alanyl-1-alanyl-1-alanyl-1-alanyl-1-alanyl-1-yep-yep-de-1, action 1-alanyl-1-yep-yep-de-1, action 1-alanyl-1-yep-1-yep-1-y

CM 1

CRN 296271-34-6 CMF C141 H219 N23 065

PAGE 1-A

PAGE 1-B

PAGE 1-C

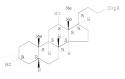
--- NH2

--- он

CM :

CRN 83-44-3 CMF C24 H40 04

Absolute stereochemistry.



RN 296271-39-1 CAPLUS

CM 1

CRN 296271-34-6 CMF C141 H219 N23 065

PAGE 1-A

PAGE 1-B

PAGE 1-C

--- NH2

--- OF

CM 2

CRN 83-49-8 CMF C24 H40 04

Absolute stereochemistry.

RN 296271-40-4 CAPLUS

S. Cholan-24-oio acid, 3, 7-dihydroxy-, (2a, 5p, 7p)-, compd. with N-modyl-L-alanyl-1-a-quitamyl-1-a-quitamyl-1-alanyl-1-alanyl-1-6(1-oxo-4-(1-pytenyl)bityl]-1-1-ysyl-1-1-ysyl-1-a-quitamyl-1-alanyl-1-s(6A-deoxy-y-cyclodextin-6A-yll-a-quitamyl-1-alanyl-1-ysyl-1-a-quitamyl-1-alanyl-1-ysyl-1-a-quitamyl-1-alanyl-1-ysyl-1-a-quitamyl-1-alanyl-1-ysyl-1-a-quitamyl-1-alanyl-1-ysyl-1-a-quitamyl-1-alanyl-1-alanyl-1-ysyl-1-a-quitamyl-1-alanyl-1-ysyl-1-a-quitamyl-1-alanyl-1-alanyl-1-alanyl-1-alanyl-1-alanyl-1-alanyl-1-ysyl-1-a-quitamyl-1-alanyl-1-

CM 1

CRN 296271-34-6 CMF C141 H219 N23 O65

PAGE 1-A

PAGE 1-B

PAGE 1-C

--- NH2

ОН

-- он

CM :

CRN 128-13-2 CMF C24 H40 O4

Absolute stereochemistry.



RN 296271-41-5 CAPLUS

CADIATE Artistics A.7.-dihydroxy-, (3o.98,7a)-, compd. with N-acetyl-nearly-la-gluthy-la-gluthy-la-gluthy-la-alpyl-la-alapyl-la-alapyl-la-gluthy-l

CM 1

CRN 270079-04-4

CMF C141 H219 N23 065

PAGE 1-C

PAGE 1-A

PAGE 2-A

PAGE 2-C

----- он

PAGE 3-A

CH2-OH

CM 2

CRN 474-25-9 CMF C24 H40 O4 Absolute stereochemistry.

RN 296271-42-6 CAPLUS

N Cholan-24-olc axid, 3,12-dihydroxy-, (3a,58,12a)-, compd. with N-acetyl-1-alanyl-1-a-quitanyl-1-a-quitanyl-1-alanyl-1-alanyl-1-y-lanyl-1-alanyl-1-y-quitanyl-1-alanyl-1-y-quitanyl-1-alanyl-1-y-quitanyl-1-alanyl-1-y-quitanyl-1-alanyl-1-y-quitanyl-1-alanyl-1-y-quitanyl-1-alanyl-1-y-quitanyl-1-alanyl-1-y-quitanyl-1-alanyl-1-quitanyl-1-qui

CM 1

CRN 270079-04-4

CMF C141 H219 N23 065

PAGE 1-A

PAGE 1-C

PAGE 2-A

----- он

PAGE 3-A

R2

CM :

CRN 83-44-3 CMF C24 H40 04

Absolute stereochemistry.



RN 296271-43-7 CAPLUS

RG ZPe2/1-3-7 CAPLUS (3,6-dihydroxy-, (3a,9),6a)-, compd.

Cholan-24-7 CAPLUS (3,6-dihydroxy-, (3a,9),6a)-, compd.

Cholan-24-7 CAPLUS (3,6-dihydroxy-)-1-alanyl-1-al

CM 1

CRN 270079-04-4 CMF C141 H219 N23 065

PAGE 1-C

PAGE 1-B

PAGE 1-A

PAGE 2-A

PAGE 2-C

----- он

PAGE 3-A

CH2-OH

CM 2

CRN 83-49-8 CMF C24 H40 O4

Absolute stereochemistry.

- RN 296271-44-8 CAPLUS
- NG ZF021-44-8 URLUS 3,7-dihydroxy-, (3a,5B,7B)-, compd.

 (Cholan-Zeloud acid,3,7-dihydroxy-, (3a,5B,7B)-, compd.

 1-4-dihydroxy-l-de-duhusy-l-de-duhusy-l-dahydr-dahydr-l-alany-l-dahyd-l-l-l-y-l-duhusy-l-dahyd-l-dah
 - CM 1
 - CRN 270079-04-4 CMF C141 H219 N23 065

PAGE 1-A

PAGE 1-C

PAGE 2-A

— он

PAGE 3-A

CM

CRN 128-13-2 CMF C24 H40 O4

Absolute stereochemistry.



270079-04-4P 296271-34-6P RI: FRF (Properties); SPN (Synthetio preparation); PREP (Properties); SPN (Synthetio preparation); PREP (Properties); SPN (Synthetio preparation); PREP (Properties); PROC (Process) (preparation of helical peptides containing $\gamma-$ cyclodextrin and

pyrene units in their side chain and their association dimer formation study by CD)

270079-04-4 CAPLUS

RN

L-Alaninamide, N-acetyl-L-alanyl-L- α -glutamyl-L-alanyl-L-alanyl-L-alanyl-L-alanyl-L-alanyl-L-alanyl-L-alanyl-N-(6A-doxy-y-cyclodextin-6A-yl)-L-glutamyl-N-gluyl-L-layyl-L- α -glutamyl-N6-[1-cyclodextin-6A-yl)-L-glutamyl-N6-[1-cyclodextin-6A-yl)-L-alanyl-N6-[1-cyclodextin-6A-yl)-L-alanyl-N6-[1-cyclodextin-6A-yl)-L-alanyl-N6-[1-cyclodextin-6A-yl)-L-alanyl-N6-[1-cyclodextin-6A-yl)-L-alanyl-N6-[1-cyclodextin-6A-yl)-L-alanyl-L-alanyl-N6-[1-cyclodextin-6A-yl)-L-alanyl-L-alanyl-L-alanyl-N6-[1-cyclodextin-6A-yl)-L-alanyl-L-alanyl-L-alanyl-N6-[1-cyclodextin-6A-yl)-L-alanyl-L-alanyl-N6-[1-cyclodextin-6A-yl)-L-alanyl-L-alanyl-N6-[1-cyclodextin-6A-yl)-L-alanyl-N6-[1-cyclodextin-6A-yl)-L-alanyl-N6-[1-cyclodextin-6A-yl)-L-alanyl-N6-[1-cyclodextin-6A-yl)-L-alanyl-N6-[1-cyclodextin-6A-yl)-L-alanyl-N6-[1-cyclodextin-6A-yl)-L-alanyl-N6-[1-cyclodextin-6A-yl)-L-alanyl-N6-[1-cyclodextin-6A-yl)-L-alanyl-N6-[1-cyclodextin-6A-yl)-L-alanyl-N6-[1-cyclodextin-6A-yl)-L-alanyl-N6-[1-cyclodextin-6A-yl)-L-alanyl-N6-[1-cyclodextin-6A-yl)-L-alanyl-N6-[1-cyclodextin-6A-yl)-L-alanyl-N6-[1-cyclodextin-6A-yl)-L-alanyl-N6-[1-cyclodextin-6A-yl)-L-alanyl-N6-[1-cyclodextin-6A-yl)-L-alanyl-N6-[1-cyclodextin-6A-yl)-N6 oxo-4-(1-pyrenyl)butyl]-L-lysyl-L-alanyl-L-alanyl-L-lysyl- (9CI) (CA INDEX NAME)

DACE 1_C

PAGE 1-B

PAGE 1-A

____ OH ____ CH2= OH

— он

PAGE 2-C

H2N-C-CH-NH-C-C-CH-NH-C-C-CH-NH-C-C-CH-NH-C-C-CH-NH-C-C-CH-NH-C-C-CH-NH-C-C-CH-NH-C-C-CH-NH-C-C-CH-NH-C-C-CH-NH-C-C-CH-NH-C-C-CH-NH-C-

PAGE 2-A

PAGE 2-B

PAGE 1-A

PAGE 1-B

PAGE 1-C

__NH2

___OH \ oH

- OH

REFERENCE COUNT:

AUTHOR(S):

23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 45 OF 61 CAPLUS COPYRIGHT 2009 ACS on STN 2000:422155 CAPLUS

ACCESSION NUMBER: DOCUMENT NUMBER:

TITLE:

Guest-responsive excimer emission in an α-helix

peptide bearing γ- cyclodextrin and two naphthalene units

Toyoda, Takayuki; Matsumura, Sachiko; Mihara, Hisakazu; Ueno, Akihiko

Department of Bioengineering, Faculty of Bioscience CORPORATE SOURCE: and Biotechnology, Tokyo Institute of Technology,

Yokohama, 226-8501, Japan

Macromolecular Rapid Communications (2000), 21(8), SOURCE:

485-488

CODEN: MRCOE3; ISSN: 1022-1336 Wiley-VCH Verlag GmbH

PUBLISHER: DOCUMENT TYPE: Journal

LANGUAGE:

English

The authors have designed and synthesized a peptide α -helix system composed of 17 amino acids with an γ -CD (γ -

cyclodextrin) sandwiched between two naphthalene units in the

peptide side chain $(\gamma-N217)$. The authors have also prepared two peptides, $\gamma-NN17$ and $\gamma-NC17$, which have one $\gamma-CD$ and one

naphthalene unit at the 5th and 13th positions, each having the

naphthalene unit at the N-terminal site $(\gamma-NN17)$ or the C-terminal

site $(\gamma-NC17)$ compared with the position of the $\gamma-CD$. For

each peptide, the y-CD and naphthalene unit were designed to be separated by one turn of the a-helix. Host-quest fluorescence spectra

consts. for all quest compds. examined is γ -NN17 > γ -NC17 >

of peptides \(\gamma - N217, \) \(\gamma - NN17 \) and \(\gamma - NC17 \) were obtained with the quest compound being one of the following: ursodeoxycholic acid,

chenodeoxycholic acid, deoxycholic acid, cholic acid, lithocholic acid and 1-adamantanol. Binding consts. were measured and the order of the binding

y-N217. <u>289714-48-3</u> <u>289714-49-4</u> <u>289714-51-8</u> 289714-52-9 289714-53-0 289714-54-1

289714-55-2 289714-56-3 289714-57-4 289714-58-2 289714-58-5 289714-58-6 289714-69-9 [Right-See 200714-59-6 289714-60-9] [Right-See 200714-59-6 289714-60-9] [Right-See 200714-58-6 289714-59-9] [Right-See 200714-58-6 289714-589714-58-6 289714-58-6 289714-58-6 289714-58-6 289714-58-6 289714-58-6 nonpreparative)

(guest-responsive fluorescence excimer emission in an α -helical peptide bearing γ - cyclodextrin and naphthalene units)

289714-48-3 CAPLUS

RN Cholan-24-orc acid, 3,7-dihydroxy-, $(3\alpha,5\beta,7\beta)$ -, compd. with N-acetyl-L-alanyl-b- α -glutamyl-L-alanyl-L-alanyl-N6-(2- $\label{eq:lambda} \texttt{naphthalenylacetyl}) - \texttt{L-lysyl-L-lysyl-L-} \\ - \alpha - \texttt{glutamyl-L-alanyl-N-(6A-constant)} - \texttt{N-(6A-constant)} - \texttt{N-(6A-constant)}$ deoxy-γ-cyclodextrin-6A-yl)-L-glutaminyl-L-alanyl-L-lysyl-L-αglutamyl-N6-(2-naphthalenylacetyl)-L-lysyl-L-alanyl-L-alanyl-L-lysyl-Lalaninamide (1:1) (9CI) (CA INDEX NAME)

CRN 289714-45-0 CMF C148 H228 N24 O66

Absolute stereochemistry.

PAGE 1-B

PAGE 1-C

10576346

PAGE 2-A

PAGE 2-B

PAGE 2-C

ме.__

PAGE 3-B

PAGE 5-A

289714-49-4 CAPLUS

 $\begin{array}{lll} & 28914^{-49-9} & \text{Carroe} \\ & \text{Cholan-24-oic acid, 3.7-dihydroxy-, (3\alpha,5\beta,7\beta)-, compd.} \\ & \text{with N-acetyl-L-alanyl-L-}\alpha\text{-glutamyl-L-alanyl-L$ INDEX NAME)

CRN 289714-46-1 CMF C133 H213 N23 065

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 128-13-2 CMF C24 H40 O4

Absolute stereochemistry.



289714-51-8 CAPLUS RN

Cholan-24-oic acid, 3,7-dihydroxy-, $(3\alpha,5\beta,7\beta)$ -, compd. with N-accyl-L-alanyl-L-alanyl-N-alanyl-L-alanyl-L-alanyl-L-alanyl-L-alanyl-L-alanyl-L-alanyl-L-alanyl-L-alanyl-L-alanyl-L-alanyl-N-alanyl-L-alanyl-N-alanyl-L-alanyl-L-alanyl-L-alanyl-L-alanyl-L-alanyl-L-alanyl-L-alanyl-Accyl-L-alanyl-Accyl-L-alanyl-L-ala NAME)

CM 1

CRN 289714-47-2 CMF C133 H213 N23 O65

CH2-C-NH-(CH2)4-CH-NH-C-CH-NH-C-CH-NH-C-CH-

10576346

PAGE 3-A

CH2-OH R2

CM 2

CRN 128-13-2 CMF C24 H40 O4

RN 289714-52-9 CAPLUS

RN Z8914-92-9 ... Anchos

Official Annual Anchos

Official Annual Anchos

Official Annual Anchos

Official Annual Annual

cox :

CRN 289714-45-0 CMF C148 H228 N24 066

Absolute stereochemistry.

PAGE 1-C

10576346

PAGE 2-A

PAGE 2-B

PAGE 2-C

PAGE 3-A

PAGE 3-B

PAGE 5-A

HO R

R7

CM 2

CRN 474-25-9 CMF C24 H40 O4

RN 289714-53-0 CAPLUS

N Cholan 24-01 action 3,7-dishgroxy-, (3p.58,7a)-, compd.
Cholan 24-01 action 3,7-dishgroxy-, (3p.58,7a)-, compd.
Cholan 24-01 action 24-01-4-e-plitamyl-l-astaryl-he-fastyl-he-

CM :

CRN 289714-46-1 CMF C133 H213 N23 065

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 474-25-9 CMF C24 H40 O4

Absolute stereochemistry.

RN 289714-54-1 CAPLUS

Cholan-24-oic acid, 3,7-dihydroxy-, (3a,58,7a)-, compd. with N-acetyl-L-alanyi-L-ala

CM 1

CRN 289714-47-2 CMF C133 H213 N23 O65

CH2-C-NH-(CH2)4-CH-NH-C-CH-NH-C-CH-NH-C-CH-

10576346

PAGE 2-A

PAGE 3-A

CH2-OH R2

CM 2

CRN 474-25-9 CMF C24 H40 O4

RN 289714-55-2 CAPLUS

nd & Abulan-24-eis acidis 3,12-dihydroxy- (3a,89,12a)-, compd.

with N-mostyl-t-almyl-t-ac-glutmyl-l-almyl-balanyl-t-almyl-m6-(2naphthalenyl-acetyl)-t-lywyl-t-a-glutmyl-t-almyl-M-(6Adoxy-y-cyglodoxtin-6A-yl)-t-glutminyl-t-almyl-t-lywyl-t-aglutmyl-M-(2-naphthalenyl-acetyl)-t-lywyl-t-almyl-t-lywyl-t-aalminismid (11) (901) (CA INDEX NAME)

co. c

CRN 289714-45-0 CMF C148 H228 N24 066

Absolute stereochemistry.

PAGE 1-C

10576346

PAGE 2-A

PAGE 2-B

PAGE 2-C

PAGE 3-A

Me__

PAGE 3-B

PAGE 5-A

HO

CM 2

CRN 83-44-3 CMF C24 H40 O4

--

RN 289714-56-3 CAPULS
Cholan-Z-4-oic acid, 3,7,12-trihydroxy-,
(3a,5p,7a,12a)-, compd. with
N-acetyl-i-alanyl-i-a-gutamyl-L-alanyl-L-alanyl-N6-(2naphthalenylacetyl)-i-l-ysyl-i-1-ysyl-i-a-gutamyl-i-lanyl-N-(6Adeoxy--ycylcdostrin-6A-yl)-i-glutamiyl-i-alanyl-i-lysyl-i-agutamyl-N6-(2-naphthalenylacetyl)-i-lysyl-i-alanyl-i-lanyl-I-lysyl-ialaninamid (1:1) (9CI) (CA INBEX NAME)

CM 1 CRN 289714-45-0 CMF C148 H228 N24 066

PAGE 1-C

PAGE 2-A

PAGE 2-B

PAGE 2-C

PAGE 3-A

Mo

PAGE 3-B

- (CH₂) 4 NH₂



CM 2

CRN 81-25-4 CMF C24 H40 05

Absolute stereochemistry.

RN

289714-57-4 CAPLUS Cholan-24-oic acid, 3-hydroxy-, (3 α ,5 β)-, compd. with N-acetyl--1alanyl-h- α -glutamyl-h-alanyl-h-alanyl-h-(2-naphthalenylacetyl)-L-lysyl-h-lysyl-h- α -glutamyl-L-alanyl-h-(6A-naphthalenylacetyl)-L-lysyl-h- α -glutamyl-h-alanyl-h-(6A-naphthalenylacetyl)-L-1ysyl-h- α -glutamyl-h- α -CN
$$\label{eq:convergence} \begin{split} &\text{deoxy-}\gamma\text{-cyclodextrin-}6A\text{-yl})\text{-L-glutaminyl-L-alanyl-L-lysyl-L-}\alpha-\\ &\text{glutamyl-}86\text{-}(2\text{-naphthalenylacetyl})\text{-L-lysyl-L-alanyl-L-alanyl-L-lysyl-L-alaniyal-ic} (:1:1) &\text{(9CI)} &\text{(CA INDEX NAME)} \end{split}$$

CM 1

CRN 289714-45-0 CMF C148 H228 N24 O66

PAGE 1-C

10576346

PAGE 2-A

PAGE 2-B

PAGE 2-C

Me.

PAGE 3-B

PAGE 5-A

RN 289714-58-5 CAPLUS

CN Cholan-24-ois acid, 3-hydroxy-, (3e,58)-, compd. with N-acetyl-i-alanyl-i-a-quitamyl-i-alanyl-i-alanyl-i-a-alanyl-i-a-alanyl-i-a-alanyl-i-a-alanyl-i-a-alanyl-i-a-alanyl-i-a-alanyl-i-a-alanyl-i-quyl-i-a-alanyl-i-quyl-i-a-alanyl-i-quyl-i-a-alanyl-i-a-alanyl-i-a-alanyl-i-a

ou -

CRN 289714-46-1 CMF C133 H213 N23 O65

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 434-13-9 CMF C24 H40 O3

Absolute stereochemistry.

RN 289714-59-6 CAPLUS

Zepyla-g-2-e CARLOS (3a,5p)-, compd. with N-acetyl-i-alanyl-i-a-g-jutamyl-i-a-alanyl-i-a-lanyl-i-a-alanyl-i-a-alanyl-i-a-alan

CM 1

CRN 289714-47-2 CMF C133 H213 N23 065

CH2-C-NH-(CH2)4-CH-NH-C-CH-NH-C-CH-NH-C-CH-

10576346

PAGE 2-A

PAGE 3-A

CH2-OH R2

CM 2

CRN 434-13-9 CMF C24 H40 O3

RN 289714-60-9 CAPLUS

CN L-Alaninamide, N-acetyl-L-alanyl-L-a-gylutamyl-L-alanyl-Me-(2-naphthalenylacetyl)-i-lysyl-L-lysyl-L-a-gylutamyl-L-alanyl-Medeoxy-y-cyclodextrin-6A-yl-1-glutaminyl-I-alanyl-L-lysyl-Lglutamyl-Me-(2-naphthalenylacetyl)-L-lysyl-L-olanyl-L-alanyl-L-lysyl-, compd. with tricysloid(3.3.1.13, 7)decan-l-ol (11) (901) (CA INDEX NAME)

CM 1

CRN 289714-45-0

CMF C148 H228 N24 O66

Absolute stereochemistry.

PAGE 1-C

10576346

PAGE 2-A

PAGE 2-B

PAGE 2-C

PAGE 3-A

Me__

PAGE 3-B

PAGE 5-A

HO____R4

HO R

HO

R7

CM 2

CRN 768-95-6 CMF C10 H16 0

289714-45-0P 289714-46-1P 289714-47-2P RI: PEP (Physical, engineering or chemical process); PRP (Properties); SPN (Synthetic preparation); PREP (Properties); PROC (Process) (preparation, CD and fluorescence spectra of an α -helical peptide bearing γ - cyclodextrin and naphthalene units) 289714-45-0 CAPLUS

RN L-Alaninamide, N-acetyl-L-alanyl-L-α-glutamyl-L-alanyl-L-alanyl-N6-CN $(2-naphthalenylacetyl)-L-lysyl-L-lysyl-L-\alpha-glutamyl-L-alanyl-N-(6A-compared to the compared to the compared$ deoxy-γ-cyclodextrin-6A-yl)-L-glutaminyl-L-alanyl-L-lysyl-L-α- $\verb|glutamyl-N6-(2-naphthalenylacetyl)-L-lysyl-L-alanyl-L-alanyl-L-lysyl-|$ (9CI) (CA INDEX NAME)

PAGE 1-C

10576346

PAGE 2-A

PAGE 2-B

ОН

PAGE 2-C

PAGE 3-A

ме.__

PAGE 3-B

PAGE 5-A

- RN 289714-46-1 CAPLUS
- Lack and the state of the stat
- *** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
- RN 289714-47-2 CAPLUS
 - N L-Alaninamide, N-acetyl-L-alanyl-L-α-glutamyl-L-alanyl-L-alanyl-L-alanyl-L-alanyl-L-a-a-glutamyl-L-alanyl-N-(6A-deoxy-γ-cyclodextin-6A-yl)-L-glutamyl-L-alanyl-L-laysl-L-α-glutamyl-N6-(2-cyclodextin-6A-yl)-L-glutamyl-N6-(2-cyclodextin-6A-yl)-N6-(2-cyclode

naphthalenylacetyl)-L-lysyl-L-alanyl-L-alanyl-L-lysyl- (9CI) (CA INDEX

PAGE 1-A

$$\begin{array}{c} \text{CO2H} \\ \text{CH}_2\text{--}\text{CH}_2 \text{ H}_2\text{N}\text{--}\text{(CH}_2)} \text{ 4} & \text{0} & \text{Me} \\ \text{CH}_2\text{--}\text{CH}_2\text{--}\text{H}_2\text{N}\text{--}\text{(CH}_2)} \text{ 4} & \text{0} & \text{Me} \\ \text{0} & \text{0} & \text{0} & \text{0} & \text{0} \\ \text{0} & \text{0} & \text{0} & \text{0} \\ \end{array}$$

AGE 1-B

PAGE 1-C

PAGE 2-A

PAGE 3-A

CH2-OH

REFERENCE COUNT: 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 46 OF 61 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2000:358926 CAPLUS

DOCUMENT NUMBER: 133:1

TITLE: Construction of α -helix peptides with β - $\frac{cyclodextrin}{cyclodextrin}$ and dansyl units and their

conformational and molecular sensing properties
AUTHOR(S): Matsumura, Sachiko; Sakamoto, Seiji; Ueno, Akihiko;

Mihara, Hisakazu

CORPORATE SOURCE: Department of Bioengineering Faculty of Bioscience and Biotechnology, Tokyo Institute of Technology,

Yokohama, 226-8501, Japan
SOURCE: Chemistry--A European Journal (2000), 6(10), 1781-1788

CODEN: CEUJED; ISSN: 0947-6539

PUBLISHER: Wiley-VCH Verlag GmbH

DOCUMENT TYPE: Journal LANGUAGE: English

AB In order to apply de novo peptide design to mol. sensing, the authors designed and synthesized α -helical peptides with β -

cyclodextrin (β-CDx) as a binding site and a dansyl unit (Dns) as a fluorescence sensing site. The conformational and mol. sensing properties of the peptides with $\beta\text{-CDx}$ and Dns in various positions were investigated. CD and fluorescence measurements revealed that $\beta\text{-CDx}$ and Dns form intramol. complexes which depend on their positions in the peptides. In the 17 residual peptides named EK3 and EK3R, in which β -CDx and Dns were introduced at the fourth and the eighth positions (EK3) or at the eighth and the fourth positions (EK3R), Dns was deeply included in the CDx cavity and formed a more stable self-inclusion complex with CDx than in the peptides EK6 and EK6R, in which these moieties were at the eighth and the fifteenth positions or at the fifteenth and the eighth positions, resp. The stability of the self-inclusion complex between β -CDx and Dns controlled the α -helix structure as well as the binding and sensing abilities for the exogenous quests. These results demonstrate the usefulness of peptide tertiary structure for arranging CDx and other functional units, and suggest that this approach is important in the development of a new type of CDx-based sensory system

17 288145-22-3 288145-24-4 288145-25-5 288145-25-5 288145-25-5 288145-25-5 288145-25-5 288145-25-5 288145-25-5 288145-35-7 288145-35-7 288145-35-7 288145-35-7 288145-35-7 288145-35-7 288145-45-6 288145-45-6 288145-45-6 288145-45-6 288145-45-6 288145-45-7 288145-45-6 288145-45-7 288

RL: FMU (Formation, unclassified); PRP (Properties); FORM (Formation, nonpreparative)

(mol.-recognition properties of α -helical peptides containing β -cyclodextrin and dansyl units)

RN 288145-23-3 CAPLUS

I --Alaninamide, N-acetyl-1-alanyl-1-a-glutamyl-1-alanyl-1-N-(6A-deoxyβ-cyclodextrin-6A-yl)-1-glutaminyl-1-alanyl-1-lysyl-1-aglutamyl-1-86-[[5-(dimethylamino)-1-naphthalenyl]sulfonyl]-1-lysyl-1-alanyl-1-alanyl-1-lysyl-1-a-glutamyl-1-alanyl-1-alanyl-1-alanyl-1-ylysyl-1-ac-glutamyl-1-alanyl-1-alanyl-1-alanyl-1-ylysyl-1-alanyl-1-a

CM 1 CRN 288145-18-6 CMF C127 H206 N24 061 S

Absolute stereochemistry.

PAGE 1-A

PAGE 2-B

NAME) CM 1

PAGE 2-C

CRN 288145-19-7 CMF C127 H206 N24 O61 S

Absolute stereochemistry.

PAGE 1-A

PAGE 2-A

PAGE 3-A

PAGE 4-B

R3

.

CM

CRN 768-95-6 CMF C10 H16 0

но

- RN 288145-25-5 CAPLUS
- CN L-Alaninamide, N-acetyl-L-alanyl-L-a-glutamyl-L-alanyl-L-alanyl-L-alanyl-L-alanyl-L-glutamyl-N-(6A-deoxy-P-cyclodextrin-6A-yl)-L-glutaminyl-L-alanyl-L-al

 $\label{eq:N6-[3-(dimethylamino)-l-naphthalenyl]sulfonyl]-L-lysyl-L-lysyl-, compd. with tricyclo[3.3.1.13,7]decan-l-ol (1:1) (9CI) (CA INDEX NAME)$

CM 1

CRN 288145-20-0 CMF C127 H206 N24 O61 S

Absolute stereochemistry.

CRN 768-95-6 CMF C10 H16 0

RN 288145-26-6 CAPLUS

ON L-Alaninamide, N-acetyl-L-alanyl-L-a-gultanyl-L-alanyl

CM 1 CRN 288145-21-1 CMF C127 H206 N24 O61 S

Absolute stereochemistry.

- * STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY AVAILABLE VIA OFFLINE PRINT *
- * STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY AVAILABLE VIA OFFLINE PRINT *

10576346

PAGE 2-C



PAGE 3-A

CM 2

CRN 768-95-6 CMF C10 H16 0



RN 288145-27-7 CAPLUS

CM

CRN 288145-18-6

CMF C127 H206 N24 O61 S

Absolute stereochemistry.

PAGE 2-C



CRN 2216-51-5 CMF C10 H20 O

Absolute stereochemistry. Rotation (-).

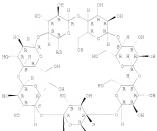
RN 288145-28-8 CAPLUS

1-Alaninamide, N-acetyi-L-alanyl-1-e-glutamyl-1-alanyl-Nef[5-dimethylamino]-1-aphthalenyl-ulfonyl-1-ipsyl-1-alanyl-1-ipsyl-L-a-glutamyl-N-(6A-deoxy-B-oyolodextrin-6A-yl)-1-g-glutamyl-N-(1-alanyl-1-ipsyl-1-a-glutamyl-1-l-alanyl-1-alanyl-1-alanyl-1-ipsyl-1-a-glutamyl-1-alanyl-1-alanyl-1-ipsyl-1-ipsyl-1-ip

CM 1

CRN 288145-19-7 CMF C127 H206 N24 O61 S

PAGE 1-A



PAGE 3-A

PAGE 3-B

PAGE 4-A

PAGE 4-B

R

= 0

CM

CRN 2216-51-5 CMF C10 H20 0

Absolute stereochemistry. Rotation (-).



RN 288145-29-9 CAPLUS

legigor/2004_must styl="rainsyl-1-massyl-1-

CM 1

CRN 288145-20-0

CMF C127 H206 N24 O61 S

CRN 2216-51-5 CMF C10 H20 0

Absolute stereochemistry. Rotation (-).



RN 288145-30-2 CAPLUS

CN L-Alantanatio, N-acetyl-L-alanyl-L-a-g-jutamyl-L-alanyl-L-al

CM 1

CRN 288145-21-1 CMF C127 H206 N24 O61 S

Absolute stereochemistry.

- * STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY AVAILABLE VIA OFFLINE PRINT *
- * STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY AVAILABLE VIA OFFLINE PRINT *



PAGE 3-A

CM 2

CRN 2216-51-5 CMF C10 H20 0

Absolute stereochemistry. Rotation (-).

- RN 288145-31-3 CAPLUS

CRN 288145-18-6 CMF C127 H206 N24 061 S

Absolute stereochemistry.

PAGE 2-C



CRN 15356-60-2

CMF C10 H20 0

Absolute stereochemistry. Rotation (+).

Ме

RN 288145-32-4 CAPLUS

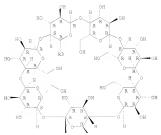
L-Alaninamide, N-acetyl-L-alanyl-L-q-qlutamyl-L-alanyl-Nef[5-dimethylamino]-l-naphthalenyl|sulfonyl-L-lysyl-L-alanyl-l-lysyl-L-q-glutamyl-N-(6A-deoxy-B-cyclodextrin-6A-yl)-L-glutamiyl-L-qlutamyl-L-q-qlutamyl-L-q-qlutamyl-L-q-alanyl-L-lanyl-L-alanyl-L-lanyl-L-lanyl-L-qlutamiyl-L-qlu

CM 1

CRN 288145-19-7 CMF C127 H206 N24 O61 S

OME C12/ H200 N24 001 2

PAGE 1-A



PAGE 3-A

PAGE 3-B

PAGE 4-A

PAGE 4-B

R3

CM

CRN 15356-60-2 CMF C10 H20 O

Absolute stereochemistry. Rotation (+).



Me

RN 288145-33-5 CAPLUS

L-Alaninamide, N-acetyl-L-alanyl-L-a-glutamyl-L-alanyl-L-alanyl-Lalanyl-L-1yeyl-L-a-glutamyl-N-(6A-dexyB-oyclodextin-6A-yl)-Lglutaminyl-L-alanyl-L-alanyl-L-yeyl-L-a-glutamyl-L-alanyl-L-alanyl-N-6-(15-(direthylamino)-l-naphthalenyl)sulfonyl-L-1yeyl-L-yeyl-glyol, compd. with (15,2R,55)-5-methyl-2-(1-methylethyl)cyclohexanol (1:1) (9CI) (CA

CM 1

CRN 288145-20-0

CMF C127 H206 N24 O61 S

CRN 15356-60-2 CMF C10 H20 O

Absolute stereochemistry. Rotation (+).

Me

RN 288145-34-6 CAPLUS

CN L-Alanisaside, N-acetyl-L-alanyl-L-a-g-jutamyl-L-alany

CM

CRN 288145-21-1 CMF C127 H206 N24 O61 S

Absolute stereochemistry.

- * STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY AVAILABLE VIA OFFLINE PRINT *
- * STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY AVAILABLE VIA OFFLINE PRINT *

10576346

PAGE 2-C



PAGE 3-A

CM 2

CRN 15356-60-2 CMF C10 H20 O

Absolute stereochemistry. Rotation (+).

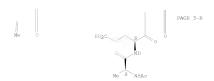
CN

RN 288145-35-7 CAPLUS

CRN 288145-18-6 CMF C127 H206 N24 061 S

Absolute stereochemistry.

PAGE 2-C



CRN 128-13-2 CMF C24 H40 04

Absolute stereochemistry.

RN 288145-36-8 CAPLUS

CM 1

CRN 288145-19-7 CMF C127 H206 N24 O61 S

PAGE 1-A

PAGE 2-A

PAGE 3-A

PAGE 3-B

PAGE 4-A

PAGE 4-B

CM 2

CRN 128-13-2 CMF C24 H40 O4

RN 288145-37-9 CAPLUS

28149-3/9 Lands 3.7-dihydroxy-. (3a.5 β .79)-. compd. Choim-2-0-10 mold 3.7-dihydroxy-. (3a.5 β .79)-. compd. lanyl-l-alanyl-l-alanyl-l-alanyl-l-alanyl-l-alanyl-l-alanyl-l-quitamiyl-N-(6A-doxy- β -cyclodoxtrin-6A-yl)-l-quitamiyl-l-alanyl-l-alanyl-l-quitamiyl-l-alanyl-l-alanyl-l-quitamiyl-l-alanyl-alanyl-l-alanyl-l-alanyl-l-alanyl-l-alanyl-l-alanyl-l-alanyl-l-a

CM

CRN 288145-20-0 CMF C127 H206 N24 O61 S

Absolute stereochemistry.

PAGE 2-B

CRN 128-13-2 CMF C24 H40 O4 Absolute stereochemistry.

CM

288145-38-0 CAPLUS RN

ZODI49-308-U CAPLUS (NOIS) CALLUS (ACC) A CALLUS (ACC) C

CRN 288145-21-1

CMF C127 H206 N24 O61 S

Absolute stereochemistry.

PAGE 1-A

- * STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY AVAILABLE VIA OFFLINE PRINT *
- * STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY AVAILABLE VIA OFFLINE PRINT *

PAGE 2-C

CRN 128-13-2 CMF C24 H40 O4

Absolute stereochemistry.

RN 288145-39-1 CAPLUS

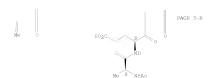
NO 2013-3-9-0-10 APULUS 3,7-dishydroxy-, (3a,8],7al-, sompd.

Ghold-3-e-10 assign-1-

CM

CRN 288145-18-6 CMF C127 H206 N24 O61 S

PAGE 2-C



CRN 474-25-9 CMF C24 H40 O4

Absolute stereochemistry.

RN 288145-40-4 CAPLUS

28149-80-023 2018 3,7-dihydroxy-, (30.58,7a)-, compd.

Othalk-Government of the property of the composition of the composition

CM 1

CRN 288145-19-7 CMF C127 H206 N24 O61 S

PAGE 1-A

PAGE 2-A

PAGE 3-A

PAGE 3-B

PAGE 4-A

PAGE 4-B

CM 2

CRN 474-25-9 CMF C24 H40 O4

RN 288145-41-5 CAPLUS

CM

CRN 288145-20-0 CMF C127 H206 N24 O61 S

Absolute stereochemistry.

PAGE 2-B

CM

CRN 474-25-9

CMF C24 H40 04

Absolute stereochemistry.

288145-42-6 CAPLUS RN

ZODI49-44-0 LANDLY AND THE ADDITIONAL NAMES IN THE ADDITIONAL ADD

CRN 288145-21-1

CMF C127 H206 N24 O61 S

Absolute stereochemistry.

PAGE 1-A

- * STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY AVAILABLE VIA OFFLINE PRINT *
- * STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY AVAILABLE VIA OFFLINE PRINT *

PAGE 2-C

CM

CRN 474-25-9

CMF C24 H40 O4

Absolute stereochemistry.

RN CN

288145-43-7 CAPLUS Cholan-24-oic acid, 3,7,12-trihydroxy-,

 $(3\alpha,5\beta,7\alpha,12\alpha)-, \ \text{compd. with} \\ N-acetyl-L-alanyl-L-\alpha-glutamyl-L-alanyl-L-alanyl-L-alanyl-L-lysyl-L-$

 $\begin{array}{lll} \alpha = & \text{glutamyl-N-}(6A-\text{deoxy-}\beta - \text{gyslodextrin-}6A-\text{yl})-L-\text{glutaminyl-L-}\\ & \text{alanyl-L-alanyl-N-}(15-\text{glutamyl-L-alanyl-N-}(15-\text{glutamyl-L-alanyl-N-}(15-\text{glutamyl-L-alanyl-N-})) & \text{glutamyl-L-alanyl-L-alanyl-L-alanin-mide} \\ & \text{(dimethylamino)-l-naphthalenyl) sulfonyl-L-l-lysyl-L-alanin-mide} \end{array}$

(1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 288145-20-0 CMF C127 H206 N24 O61 S

CM 2

CRN 81-25-4 CMF C24 H40 O5

Absolute stereochemistry.

- 288145-44-8 CAPLUS RN
- Cholan-24-oic acid, 3,7,12-trihydroxy-,

 $(3\alpha, 5\beta, 7\alpha, 12\alpha)$ -, compd. with $\label{eq:nacetyl-L-alanyl-L-a-glutamyl-L-alanyl-L-alanyl-L-alanyl-L-lysyl-L-a-glutamyl-N6-[[5-(dimethylamino)-1-naphthalenyl]sulfonyl]-L-lysyl-L-a-glutamyl-N6-[[5-(dimethylamino)-1-naphthalenyl]sulfonyl]-L-lysyl-L-a-glutamyl-N6-[[5-(dimethylamino)-1-naphthalenyl]sulfonyl]-L-lysyl-L-a-glutamyl-N6-[[5-(dimethylamino)-1-naphthalenyl]sulfonyl]-L-lysyl-L-a-glutamyl-L-a$ (CA INDEX NAME)

- CM
- CRN 288145-21-1
- CMF C127 H206 N24 O61 S

Absolute stereochemistry.

- * STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY AVAILABLE VIA OFFLINE PRINT *
- * STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY AVAILABLE VIA OFFLINE PRINT *



PAGE 3-A

CM 2

CRN 81-25-4 CMF C24 H40 O5

Absolute stereochemistry.

288145-18-6P 288145-19-7P 288145-20-0P 288145-21-1P (Properties); SPN (Properties);

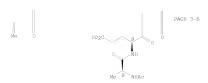
(Synthetic preparation); PREP (Preparation); PROC (Process) (preparation, conformation and mol.-recognition properties of α -helical peptides containing β - gvelodextrin and

dansyl units) RN 288145-18-6 CAPLUS

Landaminande, N-acetyl-L-alanyl-L-a-glutamyl-L-alanyl-N-(6A-deoxyp-cyclodextrin-6A-yl)-L-glutaminyl-L-alanyl-L-lysyl-L-a glutamyl-K-(16-(dentrhylamino)-1-anphthalenyl-jsulfonyl-L-lysyl-L-alanyl-L-alanyl-L-lysyl-L-a-glutamyl-L-alanyl-L-alanyl-L-alanyl-L-lysyl-(961) (CA NDEX MASS)

Absolute stereochemistry.

PAGE 2-C



- RN 288145-19-7 CAPLUS
- No. 280180-19-1 Lattion Challentinamide, N-acetyl-L-alanyl-L-α-glutamyl-L-alanyl-N6-[[5-α-glutamyl-L-alanyl-n6-[[5-α-glutamyl-L-alanyl

Absolute stereochemistry.

PAGE 1-A

PAGE 2-A

PAGE 3-A

PAGE 3-B

NMe 2

PAGE 4-A



33

RN 288145-20-0 CAPLUS

Zesi39-20-U Chruse
L-Alaniandide, N-acetyl-L-alanyl-L-a-glutamyl-L-alanyl-L-alanyl-L-alanyl-L-alanyl-L-glutamyl-N-(6A-deoxy-B-cyclodextrin-6A-yl)-L-glutamiyl-1-alanyl-L-glutamiyl-1-a-glutamiyl-1-alanyl-L-glutamiyl-1-a-glutamiyl-1-alanyl-L-glutamiyl-1-alanyl-L-glutamiyl-C-(5-(dimethylamino)-1-anghthalenyl)sulfonyl]-L-lysyl-L-lysyl-(9CI)(CA INDEX NAME)

Absolute stereochemistry.

- RN 288145-21-1 CAPLUS
- RN 28849-21=1 CAPLUS
 L-Alanianide, N-acetyl-L-alanyl-L-a-glutamyl-L-alanyl-L-al

PAGE 1-A

- * STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY AVAILABLE VIA OFFLINE PRINT *
- * STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY AVAILABLE VIA OFFLINE PRINT *

PAGE 2-C

PAGE 3-A

REFERENCE COUNT: 62 THERE ARE 62 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 47 OF 61 CAPLUS COPYRIGHT 2009 ACS on STN 2000:288756 CAPLUS

ACCESSION NUMBER: DOCUMENT NUMBER:

Targeting of proteinase inhibitors with β -

cyclodextrin conjugates AUTHOR(S): chaschke, Norbert; Assfalq-Machleidt, Irmgard;

Machleidt, Werner; Lassleben, Thomas; Sommerhoff, Christian P.; Moroder, Luis

CORPORATE SOURCE: Max-Planck-Institut fur Biochemie, Martinstried,

82152, Germany SOURCE: Peptides 1998, Proceedings of the European Peptide

Symposium, 25th, Budapest, Aug. 30-Sept. 4, 1998 (1999), Meeting Date 1998, 838-839. Editor(s): Bajusz, Sandor; Hudecz, Ferenc. Akademiai Kiado: Budapest, Hung.

CODEN: 68WKAY

DOCUMENT TYPE: Conference

LANGUAGE: English

The authors have taken a previously known potent cathepsin B inhibitor and conjugated it via a spacer to a functionalized β- cyclodextrin to target the potential drug to the appropriate place.

277334-89-1 289490-23-9

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study) (targeting of proteinase inhibitors with β - cyclodextrin

conjugates) 277334-89-1 CAPLUS

Glycinamide, N-[[(2S,3S)-3-carboxyoxiranyl]carbonyl]-L-leucylqlycyl-N-[6-[(6A-deoxy-B-cyclodextrin-6A-yl)amino]-6-oxohexyl]-,

(1-1')-amide with L-leucyl-L-proline (9CI) (CA INDEX NAME)

Absolute stereochemistry.

- RN
- 289490-23-9 CAPUS Silvananide, N-[(28,38)-3-carboxyoxiranyl]carbonyl]-L-leucylglycyl-N-[6-[(66,60-didexy-6A-iodo-p-cyclodextrin-6D-yl]amino]-6-oxohoxyll-, (1-1')-amide with l-leucyl-L-proline 1,1-dimethylethyl ester (9CI) (CA INDEX NAME) CN

PAGE 1-A

REFERENCE COUNT:

THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 48 OF 61 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2000:269115 CAPLUS

DOCUMENT NUMBER:

Cyclodextrin-peptide hybrid as a hydrolytic catalyst having multiple functional groups

AUTHOR(S): Tsutsumi, Hiroshi; Hamasaki, Keita; Mihara, Hisakazu;

Ueno, Akihiko Department of Bioengineering, Faculty of Bioscience

and Biotechnology, Tokyo Institute of Technology,

Yokohama, 226-8501, Japan

Bioorganic & Medicinal Chemistry Letters (2000),

10(8), 741-743 CODEN: BMCLE8; ISSN: 0960-894X

PUBLISHER: Elsevier Science Ltd.

DOCUMENT TYPE: Journal

LANGUAGE: English

A designed cyclodextrin-peptide hybrid, which has multiple

functional groups on its α -helix peptide backbone, has been synthesized as a catalyst for ester hydrolysis. Kinetic study revealed that the carboxylate group plays a key role in this system.

283174-31-2 283174-32-3 RL: BSU (Biological study, unclassified); CAT (Catalyst use); BIOL

(Biological study); USES (Uses) (cyclodextrin-peptide hybrid as a hydrolytic catalyst having

multiple functional groups) 283174-31-2 CAPLUS

L-Alaninamide, N-acetyl-L-alanyl-L-alanyl-L-alanyl-L-aglutamyl-L-

 $alanyl-L-\alpha-glutamyl-L-alanyl-L-arginyl-L-alanyl-L-histidyl-L-alanyl-L-ala$ $L-\alpha$ -glutamyl-L-alanyl-N-(6A-deoxy- β -cyclodextrin-6A-yl)-Lglutaminyl-L-alanyl-L-arginyl-L-alanyl-L-alanyl- (9CI) (CA INDEX NAME)

PAGE 3-B

RN 283174-32-3 CAPLUS

Nami Alamanamide, Nacetyl-L-alanyl-

Absolute stereochemistry.

PAGE 1-A

PAGE 2-A

H2N-__

PAGE 3-B

THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 49 OF 61 CAPLUS COPYRIGHT 2009 ACS on STN

2000:235094 CAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER:

CORPORATE SOURCE:

β- Cyclodextrin/epoxysuccinyl peptide

conjugates: a new drug targeting system for tumor

cells

AUTHOR(S): Schaschke, Norbert; Assfalg-Machleidt, Irmgard;

Machleidt, Werner; Lassleben, Thomas; Sommerhoff, Christian P.; Moroder, Luis

Max-Planck-Institut fur Biochemie, Martinsried, 82152,

Germany SOURCE:

Bioorganic & Medicinal Chemistry Letters (2000),

CODEN: BMCLE8; ISSN: 0960-894X

Elsevier Science Ltd.

DOCUMENT TYPE:

LANGUAGE:

 β - Cyclodextrin is known to form inclusion complexes with

hydrophobic drugs. Several tumor cell lines are known to secrete and/or contain membrane-associated cathepsin B which is possibly involved in invasion and metastasis. Based on this information, our recently developed endo-epoxysuccinyl (Eps) peptide inhibitor

MeO-Gly-Gly-Leu-(2S,3S)-tEps-Leu-Pro-OH for cathepsin B was conjugated with β - cyclodextrin to obtain a site-directed drug carrier system. Furthermore, the conjugate w with the cytotoxic drug methotrexate. Furthermore, the conjugate was shown to form an inclusion complex

277334-89-1P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent)

 $(\beta - \frac{\text{cyclodextrin}}{\text{cyclodextrin}})$ epoxysuccinyl peptide conjugates as drug

the <u>cyclodextEnr</u>/spoxysucounty paperne conjugates as drug targeting system for tumor cells; 277334-89-1 CAPIUS Glycinanide, N-[(28,38)-3-carboxyoxiranyl]carbonyl]-L-leucylglycyl-N-[6-RN CN [(6A-deoxy-β-cyclodextrin-6A-yl)amino]-6-oxohexyl]-,

(1→1')-amide with L-leucyl-L-proline (9CI) (CA INDEX NAME)

Absolute stereochemistry.

277334-90-4P RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

RN

(B- cyclodextrin/epoxysuccinyl peptide conjugates as drug targeting system for tumor cells) 27734-9-0-4 CAPLUS Glycinamide, N-[[(28,38)-3-carboxyoxiranyl]carbonyl]-L-leucylglycyl-N-[6-[(6A-deoxy-β-cyclodextrin-6A-yl)amino]-6-oxohexyl]-,

(1→1')-amide with L-leucyl-L-proline, compd. with N-[4-[((2,4-diamino-6-pteridiny1)methy1]methylamino]benzoy1]-L-glutamic acid (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 277334-89-1 CMF C73 H119 N7 O44

Absolute stereochemistry.

CM

CRN 59-05-2

CMF C20 H22 N8 O5

Absolute stereochemistry.

277334-88-0D
RLI RGI (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

- RN
- (seascant or reagent/epoxysuccinyl peptide conjugates as drug
 targeting system for tumor cells)
 277334-88-0 CAPLUS
 Glycinamide, N-[([63,38]-3-carboxyoxiranyl]carbonyl]-1-leucylglycyl-N-[6[[63-dexxp-cyclodextin-6A-yl]amino]-6-oxohoxyl]-,

(1-1')-amide with L-leucyl-L-proline 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

REFERENCE COUNT:

- 4 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT
- L8 ANSWER 50 OF 61 CAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 2000:176768 CAPLUS DOCUMENT NUMBER: 132:347898
- FITLE: Association and guest-induced dissociation of a novel $\alpha\text{-helix}$ peptide bearing pyrene and $\gamma\text{-}$

cyclodextrin in the side chains

Hossain, Mohammed Akhter; Hamasaki, Keita; Mihara, Hisakazu; Ueno, Akihiko

CORPORATE SOURCE: Department of Bioengineering, Faculty of Bioscience

and Biotechnology, Tokyo Institute of Technology, Yokohama, 226-8501, Japan Chemistry Letters (2000), (3), 252-253

CODEN: CMLTAG: ISSN: 0366-7022

Chemical Society of Japan DOCUMENT TYPE:

LANGUAGE: English

AB A designed α-helix peptide, γ-PR17, which bears γ-

cyclodextrin (γ-CD) and pyrene units on an AC-AEAAAKEAEAKEKAAKA-NH2 chain, exhibits both monomer and excimer emissions, indicating that γ -PR17 forms an association dimer that could be dissociated upon addition of hyodeoxycholic acid as a guest for γ -CD.

270079-04-4P

RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation) (preparation, mol. association, and dissociation of a cyclodextrin and pyrene-containing peptide)

270079-04-4 CAPLUS

L-Alaninamide, N-acetyl-L-alanyl-L-α-glutamyl-L-alanyl-L-alanyl-L- $\begin{array}{lll} alanyl-L-lysyl-L-\alpha-glutamyl-L-alanyl-N-(6A-deoxy-\gamma-cyclodextrin-6A-yl)-L-glutaminyl-L-alanyl-L-lysyl-L-\alpha-glutamyl-N6-[1-alanyl-L$ oxo-4-(1-pyrenyl)butyl]-L-lysyl-L-alanyl-L-alanyl-L-lysyl- (9CI) (CA INDEX NAME)

PAGE 1-C

PAGE 2-A

PAGE 2-C

___ СН2- ОН

PAGE 3-A

REFERENCE COUNT:

AUTHOR(S):

THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 51 OF 61 CAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER:

2000:56459 CAPLUS

DOCUMENT NUMBER: TITLE:

Synthesis and enhanced chemiluminescence of new mono-cyclomaltooligosaccharide-bound

6-phenylimidazo[1,2-a]pyrazin-3(7H)-ones

Teranishi, Katsunori; Tanabe, Saori; Komoda, Atsuko;

Hisamatsu, Makoto; Yamada, Tetsuya CORPORATE SOURCE: Faculty of Bioresources, Mie University, Mie, 514,

Japan

SOURCE:

Proceedings of the International Symposium on Cyclodextrins, 9th, Santiago de Comostela, Spain, May 31-June 3, 1998 (1999), Meeting Date 1998, 153-156. Editor(s): Labandeira, J. J. Torres; Vila-Jato, J. L.

Kluwer Academic Publishers: Dordrecht, Neth.

CODEN: 68NHAE

Conference

DOCUMENT TYPE: LANGUAGE: English

We report a first example of the synthesis of light-producing compds., in which MCLA, a chemiluminescent chromophore, is covalently bound to one cyclodextrin mol., and show that the chemiluminescence is effectively enhanced in an aqueous solvent.

261736-14-5 RL: PRP (Properties)

(synthesis and enhanced chemiluminescence of new monocyclomaltooligosaccharidebound phenylimidazopyrazinones) 261736-14-5 CAPLUS

y-Cyclodextrin, 6A-deoxy-6A-[[[N-[3-[3,7-dihydro-6-(4-methoxyphenyl)-

3-oxonmidazo[1,2-a]pyrazin-2-yl]-1-oxopropyl]glycyl]glycyl]amino]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-C

THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 52 OF 61 CAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 2000:56440 CAPLUS

DOCUMENT NUMBER:

Thiourea-bridged B- cyclodextrin conjugates

AUTHOR(S):

Mellet, C. Ortiz; Fernandez, J. M. Garcia; Benito, J. M.; Law, H.; Chmurski, K.; Defaye, J.

CORPORATE SOURCE: Departamento de Quimica Organica, Facultad de Quimica,

Universidad de Sevilla, Seville, E-41071, Spain Proceedings of the International Symposium on SOURCE:

Cyclodextrins, 9th, Santiago de Comostela, Spain, May

31-June 3, 1998 (1999), Meeting Date 1998, 77-80. Editor(s): Labandeira, J. J. Torres; Vila-Jato, J. L.

Kluwer Academic Publishers: Dordrecht, Neth.

CODEN: 68NHAE Conference

DOCUMENT TYPE: LANGUAGE: English

CASREACT 132:237293 OTHER SOURCE(S):

Saccharide as well as peptide antennae have been efficiently appended to the primary hydroxyl rim of the β -CD core through thiourea tethers.

The synthetic strategy involves the coupling reaction of glycosyl or

peptide isothiocyanates with amine functionalized β -CDs and has been applied to the preparation of mono- as well as heptavalent derivs. The new conjugates exhibited a dramatic increase in water solubility as compared to β -CD itself while retaining the inclusion properties towards the

anticancer drug taxotere. 261714-40-3P 261714-41-4P

(Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(thiourea-bridged $\beta \underline{\mathtt{cyclodextrin}}$ conjugates with

peptides and inclusion complexes with taxotere)

261714-40-3 CAPLUS

Glycine, N-[[(6A-deoxy- β -cyclodextrin-6A-yl)amino]thioxomethyl]-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 261714-41-4 CAPLUS CN L-Phenylalanine, N-[[(6A-deoxy- β -cyclodextrin-6A-yl)amıno]thioxomethyl]-, methyl ester (9CI) (CA INDEX NAME)

ОН

PAGE 1-A

PAGE 2-A

PAGE 1-A

ОН

PAGE 2-A

REFERENCE COUNT:

THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ACCESSION NUMBER:

L8 ANSWER 53 OF 61 CAPLUS COPYRIGHT 2009 ACS on STN 1999:396543 CAPLUS

DOCUMENT NUMBER:

Cyclodextrin as carrier of bioactive

peptides

AUTHOR(S):

Schaschke, Norbert; Fiori, Stella; Fourmy, Daniel; Moroder, Luis

CORPORATE SOURCE:

Max-Planck-Institut fur Biochemie, Martinsried, 82152, Germany

SOURCE:

Peptides: Frontiers of Peptide Science, Proceedings of the American Peptide Symposium, 15th, Nashville, June 14-19, 1997 (1999), Meeting Date 1997, 315-316. Editor(s): Tam, James P.; Kaumaya, Pravin T. P.

Kluwer: Dordrecht, Neth.

CODEN: 67UCAR

DOCUMENT TYPE: Conference LANGUAGE: English

AB A symposium report. Tetra- and heptagastrin peptide/8cyclodextrin conjugates were prepared and their binding affinities

the CCK-β/gastrin receptor were determined

211360-86-0P 211360-87-1P (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(preparation and cyclodextrin-supported bioactive peptides) 211360-86-0 CAPLUS

L-Phenylalaninamide, N-[4-[(6A-deoxy-β-cyclodextrin-6A-y1)amino]-1,4dioxobutyl]-L-tryptophyl-L-norleucyl-L-a-aspartyl- (9CI) (CA INDEX NAMEL

PAGE 3-A

RN 211360-87-1 CAPLUS

L=Dool of Landon Carloon (Alloon Landon) = 1.4-[(6λ-deoxy-β-cyclodextrin-6λ-yl) amino]-1,4-dioxobutyl]-L-alanyl-L-tyrosylslycyl-L-tryptophyl-L-norleucyl-L-α-aspartyl- (9C1) (CA INDEX AME)

PAGE 1-A

PAGE 2-A

PAGE 3-A

PAGE 3-B

```
L8 ANSWER 54 OF 61 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER:
                           1998:431175 CAPLUS
DOCUMENT NUMBER:
ORIGINAL REFERENCE NO.:
                           Cyclodextrin as Carrier of Peptide Hormones.
                            Conformational and Biological Properties of B-
                           Cyclodextrin/Gastrin Constructs
AUTHOR(S):
                           Schaschke, Norbert; Fiori, Stella; Weyher, Elisabeth;
                           Escrieut, Chantal; Fourmy, Daniel; Mueller, Gerhard;
                           Moroder, Luis
CORPORATE SOURCE:
                           Max-Planck-Institut fuer Biochemie, Martinsried,
                           82152, Germany
SOURCE:
                           Journal of the American Chemical Society (1998),
                           CODEN: JACSAT; ISSN: 0002-7863
PUBLISHER:
                          American Chemical Society
DOCUMENT TYPE:
LANGUAGE:
                          English
     The C-terminal tetrapeptide amide of gastrin, the shortest sequence of
     this gastrointestinal hormone capable of exhibiting all the biol.
     properties even though at reduced potency, and the related heptapeptide
     amide were covalently linked to mono-(6-succinylamino-6-deoxy)-8-
     cyclodextrin to analyze the effect of the bulky cyclic
     carbohydrate moiety on recognition of the peptides by the
     G-protein-coupled CCK-B/gastrin receptor and on their signal transduction
     potencies. With the four-carbon succinyl spacer and particularly with the
     addnl. tripeptide spacer in the heptapeptide/β- cyclodextrin conjugate, full recognition by the receptor was obtained with binding
     affinities identical to those of the unconjugated tetrapeptide and with a
     potency comparable to that of full agonists. Docking of this conjugate
     onto a structure of the human CCK-B receptor derived by homol. modeling
     indicates sufficient free space of the peptide moiety for intermol.
     interaction at the putative gastrin binding site, whereby addnl.
     interactions of the cyclodextrin with the receptor surface
     apparently suffice for stabilizing the complex and thus for triggering the
     full hormonal message. The host/quest complexation of the peptide moiety
     by the \beta- \underline{cyclodextrin} which seems to occur at least in the
     case of the tetrapeptide conjugate does not suffice in its strength for competing with the receptor recognition. However, multiple presentation
     of the tetragastrin by its covalent linkage to the
     heptakis-(6-succinylamino-6-deoxy)-β- cyclodextrin leads to
     peptide/peptide and/or peptide/cyclodextrin collapses with
     strong interferences in the receptor recognition process. Retention of
     full agonism by suitably designed monoconjugates of bioactive peptides
     with cyclodextrins suggests a highly promising approach for
     targeting host/guest complexed or covalently bound cytotoxic drugs to
     specific tumor cells for receptor-mediated internalization.
     211360-86-0P 211360-87-1P
     RL: BAC (Biological activity or effector, except adverse); BPR (Biological
     process); BSU (Biological study, unclassified); PRP (Properties); SPN
     (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses)
         (conformational and biol. properties of β- cyclodextrin
         /gastrin constructs)
```

L-Phenylalaninamide, N-[4-[(6A-deoxy-β-cyclodextrin-6A-yl)amino]-1,4dioxobutyl]-L-tryptophyl-L-norleucyl-L-α-aspartyl- (9CI) (CA INDEX

Absolute stereochemistry.

NAME)

211360-86-0 CAPLUS

PAGE 3-A

RN 211360-87-1 CAPLUS

L=Dool of Landon Carloon (Alloon Landon) = 1.4-[(6λ-deoxy-β-cyclodextrin-6λ-yl) amino]-1,4-dioxobutyl]-L-alanyl-L-tyrosylslycyl-L-tryptophyl-L-norleucyl-L-α-aspartyl- (9C1) (CA INDEX AME)

PAGE 3-A

PAGE 3-B

L8 ANSWER 55 OF 61 CAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 1998:282001 CAPLUS

DOCUMENT NUMBER: ORIGINAL REFERENCE NO.:

Synthesis and intramolecular inclusion studies of

tryptophan-modified-β- cyclodextrins

Donze, Cecile: Rizzarelli, Enrico; Vecchio, Graziella Dipartimento di Scienze Chimiche, Universita di

CORPORATE SOURCE:

Journal of Inclusion Phenomena and Molecular

Recognition in Chemistry (1998), 31(1), 27-41

CODEN: JIMCEN; ISSN: 0923-0750 Kluwer Academic Publishers

DOCUMENT TYPE:

LANGUAGE:

β- Cyclodextrins functionalized by D or L-tryptophan were

synthesized. NMR, CD and fluorescence investigations were carried out showing the clear intramol. inclusion of the tryptophan in the

cyclodextrin cavity. The derivs. act as a fluorescent sensor

which is useful for detecting organic species in solution Furthermore, derivs. L and D show different sensitivity with regard to their interaction with a guest. The difference might be due to the disposition of the indole with

respect to the cavity of the cyclodextrin, induced by the

chirality of the tryptophan. 208038-18-0P 208038-19-1P 208038-20-4P

PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)

(synthesis and intramol. inclusion studies of tryptophanmodifiedbcyclodextrins)

RN 208038-18-0 CAPLUS

β-Cyclodextrin, 6A-[[2-[[(2S)-2-amino-3-(1H-indol-3-yl)-1oxopropyl]amino]ethyl]amino]-6A-deoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

PAGE 3-A

HO'

RN 208038-19-1 CAPLUS

N β-Cyclodextrin, 6A-[[3-[(28)-2-amino-3-(1H-indol-3-y1)-1-oxopropyl]amino]propyl]amino]-6A-deoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

RN 208038-20-4 CAPLUS
CN 6-Cyclodextrin, 6A-[[2-[[(2R)-2-amino-3-(1H-indol-3-yl)-1-oxopropyl]amino]ethyl]amino]-6A-deoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

PAGE 2-A

PAGE 2-A

PAGE 3-A

208038-21-5 CAPLUS RN

 $\beta\text{-Cyclodextrin, }6A\text{-[[3-[[(2R)-2-amino-3-(1H-indol-3-y1)-1-oxopropyl]amino]propyl]amino]-}6A\text{-deoxy--(9CI)--(CA INDEX NAME)}$

Absolute stereochemistry.

PAGE 1-A

PAGE 2-A

208038-22-6P RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(synthesis and intramol. inclusion studies of tryptophanmodifiedbcyclodextrins)

208038-22-6 CAPLUS

β-Cyclodextrin, 6A-deoxy-6A-[[2-[[(2S)-2-[[(1,1-CN dimethylethoxy)carbonyl]amino]-3-(1H-indol-3-y1)-1-oxopropyl]amino]ethyl]amino]- (9CI) (CA INDEX NAME)

REFERENCE COUNT: THERE ARE 37 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 56 OF 61 CAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 1996:491249 CAPLUS DOCUMENT NUMBER:

ORIGINAL REFERENCE NO.:

Cyclodextrins as templates for the presentation of protease inhibitors

AUTHOR(S): Schaschke, N.; Musiol, H.-J.; Assfalq-Machleidt, I.;

Machleidt, W.; Rudolph-Boehner, S.; Moroder, L. CORPORATE SOURCE: Max-Planck-Institut fuer Biochemie, AG Bioorganische

Chemie, Am Klopferspitz 18A, Martinsried, 82152,

Germany

SOURCE: FEBS Letters (1996), 391(3), 297-301 CODEN: FEBLAL; ISSN: 0014-5793

PUBLISHER: Elsevier

DOCUMENT TYPE: LANGUAGE: English

OTHER SOURCE(S): CASREACT 125:215415

AB Mono(6-succinylamido-6-deoxy)-β- cyclodextrin was

synthesized by classical carbohydrate chemical and used as a template mono-functionalized with the linear, fully flexible 4C-spacer carboxylate for covalent linkage of the calpain inhibitor leucyl-leucyl-norleucinal. Spectroscopic analyses of the conjugate do not support a self-inclusion of part of the hydrophobic peptide tail, but confirm its intra-or intermol. interaction with the template moiety that leads to full water solubility The inhibitory potency of the \$\beta_{\text{cyclodextrin}} peptide aldehyde construct was compared with that of the parent ho-leu-leu-Nie-H against castepgsin B and calpain. Despite the large size of the template the inhibition of cathepgin B was only slightly reduced in full agreement with the X-ray structure of this enzyme which shows full accessibility of the S-subsites. For this enzyme the 4C-spacer is apparently swiftcient to guarantee optimal interaction of the peptide tail with the binding cleft. Conversely, for \text{u-clapain} a significantly decreased inhibitory potency was obtained with the conjugate suggesting steric interference of the template in the binding process. These results show that the beneficial properties of the \text{cyclodextrin} template can be retained in conjugates with bioactive peptides if attention is paid to optimize in each case the size and nature of the spacer for optimal recognition of the grated bishool.

T 181487-21-8P

RL: RAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(preparation of cyclodextrin conjugates for presentation of protease inhibitors)

181487-21-8 CAPLUS

CN L-Norleucine, N-[N-[N-[4-[(6A-deoxy-β-cyclodextrin-6A-yl)amino]-1,4-dioxobutyl]-L-leucyl]-L-leucyl]- (9CI) (CA INDEX NAME)

HO-

но-

1057634

L8 ANSWER 57 OF 61 CAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 1995:519246 CAPLUS

ACCESSION NUMBER: DOCUMENT NUMBER:

DOCUMENT NUMBER: 123:314515 ORIGINAL REFERENCE NO.: 123:56403a,56406a

TITLE: Potential formation of intramolecular inclusion

complexes in peptido-cyclodextrins as

evidenced by NMR spectroscopy

Djedaieni-Pilard, Florence; Azaroual-Bellanger, Nathalie; Gosnat, Muriel; Vernet, Delphine; Perly,

Bruno

CORPORATE SOURCE: Service de Chimie Moleculaire, CEA, Gif sur Yvette,

F-91191, Fr.

SOURCE: Journal of the Chemical Society, Perkin Transactions 2: Physical Organic Chemistry (1995), (4), 723-30

CODEN: JCPKBH; ISSN: 0300-9580
PUBLISHER: Royal Society of Chemistry

DOCUMENT TYPE: Journal LANGUAGE: English

AB Investigations of the structure of $\beta-$ and $\gamma-$

cyclodextrin derivs. in solution obtained by grafting amino acids or

peptides are presented. These compds. are models for vectorization-dedicated mol. carriers. For some amino acids, strong

intramol. self-inclusion complexes are formed in aqueous solution. This process strongly depends upon the nature and position of the pertinent amino acid

in the peptide sequence. Two dimensional NMR expts, are used in conjunction with competition with external guests to evidence and estimate the strength of these auto-inclusion complexes.

IT 169624-71-9P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and intramol, inclusion complexation in peptido-

, (S) - (9CI) (CA INDEX NAME)

cyclodextrins as evidenced by NMR)
RN 169624-71-9 CAPLUS

γ-Cyclodextrin, 6A-deoxy-6A-[[2-[[2-[[(9H-fluoren-9-ylmethoxy]carbonyl]amino]-3-(1H-indol-3-yl)-1-oxopropyl]amino]ethyl]amino]-

PAGE 1-A

169624-51-5p 169624-52-6p 169624-53-7p 169624-53-8p 169624-53-1p 169624-63-8p 169624-63-1p 169624-63-8p 169624-63-8p 169624-63-1p 169624-63-1p 189624-63-1p 18962

the epitation and inclambi. Inclusion complexation in peptido-cyclodextrim as evidenced by NMR) 169624-51-5 CAPLIS (CA Ciycinaride, L-phenylalanyl-N-(6A-deoxy-β-cyclodextrin-6A-yl)- (9CI) (CA INDEX NAME) RN CN

Absolute stereochemistry.

PAGE 1-A

RN 169624-52-6 CAPLUS

CN L-Phenylalaninamide, glycyl-N-(6A-deoxy-β-cyclodextrin-6A-yl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

PAGE 2-A

RN

169624-53-7 CAPLUS Glycinamide, L-tyrosyl-N-(6A-deoxy- β -cyclodextrin-6A-yl)- (9CI) (CA INDEX NAME) CN

PAGE 1-A

RN

169624-54-8 CAPLUS L-Tyrosinamide, glycyl-N-(6A-deoxy-β-cyclodextrin-6A-yl)- (9CI) (CA INDEX NAME)

PAGE 1-A

- RN 169624-57-1 CAPLUS
 CN y-Cyclodextrin, 6A-[[2-([2-amino-3-(1H-indol-3-y1)-1-oxopropyllamino]ethyl]amino]-6A-deoxy-, (S)- (9CI) (CA INDEX NAME)
- *** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
- * STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY AVAILABLE VIA OFFLINE PRINT *

PAGE 2-A CH2-OH

- RN 169624-62-8 CAPLUS
 - N L-Phenylalaninamide, N-[(9H-fluoren-9-ylmethoxy)carbonyl]glycyl-N-(6A-deoxy-β-cyclodextrin-6A-yl)- (9CI) (CA INDEX NAME)

- RN 169624-63-9 CAPLUS
 CN Glycinamide, N-[(9f-fluoren-9-ylmethoxy)carbonyl]-L-phenylalanyl-N-(6A-deoxy-f-oyclodextrin-6A-yl)- (90I) (CA INDEX NAME)

PAGE 1-A

- 169624-64-0 CAPLUS L-Tyrosinamide, N-[(9H-fluoren-9-ylmethoxy)carbonyl]glycyl-N-(6A-deoxy-β-cyclodextrin-6A-yl)- (9CI) (CA INDEX NAME) CN

RN

169624-65-1 CAPLUS Glydinamide, N-[(9H-fluoren-9-ylmethoxy)carbonyl]-L-tyrosyl-N-(6A-deoxy-B-cyclodextin-6A-yl)- (9CI) (CA INDEX NAME)

PAGE 1-A

L8 ANSWER 58 OF 61 CAPLUS COPYRIGHT 2009 ACS ON STN ACCESSION NUMBER: 1995:352411 CAPLUS OCCUMENT NUMBER: 122:265633 CRIGINAL REFERENCE NO.: 122:48553a

TITLE: Synthesis and characterization of

cyclomaltoheptaose-based metal chelants as probes for intestinal permeability

AUTHOR(S): Capretta, Alfredo; Maharajh, Rabindranath B.; Bell, Russell A.

CORPORATE SOURCE: Department of Chemistry, McMaster University,

Hamilton, ON, L88 4M1, Can.
SOURCE: Carbohydrate Research (1995), 267(1), 49-63

CODEN: CRBRAT; ISSN: 0008-6215 PUBLISHER: Elsevier

DOCUMENT TYPE: Journal LANGUAGE: English

B The syntheses of two cyclomaltoheptaose-based metal chelants, cyclomaltoheptaose-chiamide-disulfur (CD-DADS), are described. The chelant cyclomaltoheptaose-diamide-disulfur (CD-DADS), are described. The chelant moieties are attached to the 6-position of a single pyranose in the cyclomathoheptaose via a short diamine spacer chain. Characterization of these novel chelants has been achieved using NMM and MS techniques. The peculier fluxional properties of the CD-EDTA mols. is also discussed.

T 162332-01-6P 162428-27-5P 162438-66-6P

162438-67-7P RL: RCT (Reactant); SI

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(synthesis and characterization of cyclomaltoheptaosebased metal chelants as probes for intestinal permeability)

RN 162332-01-6 CAPLUS

CN

β-Cyclodextrin, 6A-deoxy-6A-[[3-[[1-oxo-2,3-

bis[[[(triphenylmethyl)thio]acetyl]amino]propyl]amino]propyl]amino] - (9CI)
 (CA INDEX NAME)

PAGE 1-A

PAGE 1-B



PAGE 2-A

но-

HO-

PAGE 2-B

RN 162428-27-5 CAPLUS
CN B-Cyclodextrin, 6A-deoxy-6A-[[3-[[1-oxo-2,3-bis[[[[(tripbenylmethyl)thio]acetyl]amino]propyl]amino]propyl]amino]-, (S)-(9CI) (CA INDEX MAME)

10576346

PAGE 1-A

PAGE 1-B

PAGE 2-A

HO-

PAGE 2-B

 $\label{eq:control_equation} \begin{tabular}{ll} 162438-66-6 & CAPLUS \\ Glycine, $M-[2-[bis(carboxymethyl)amino]ethyl]-M-[2-[[2-[(6A-deoxy-\beta-cycledexrin-6A-yl)amino]ethyl]amino]-2-oxoethyl]- (901) & (CA_INDEX_NAME) \\ 162438-66-6 & CAPLUS & CAPLU$ RN CN

> PAGE 1-A ${\tt HO_2C-CH_2-N-CH_2-CH_2-N-CH_2-C-NH-CH_2-}$ ногс-снг ногс-снг

> > но-

HO-

RN 162438-67-7 CAPLUS

CN Glycine, N-[2-[bis(carboxymethyl)amino]ethyl]-N-[2-[[3-[(6A-deoxy-β-cyclodextrin-6A-yl)amino]propyl]amino]-2-oxoethyl]- (9CI) (CA INDEX NAME)

PAGE 1-A
H02C-CH2-N-CH2-CH2-N-CH2-C-NH-(CH2)3H02C-CH2 H02C-CH2 O

но-

но-

PAGE 1-B

ACCESSION NUMBER:

155635-13-5P RL: PREP (Preparation)

155635-13-5 CAPLUS

L8 ANSWER 59 OF 61 CAPLUS COPYRIGHT 2009 ACS on STN

1994:442855 CAPLUS

(preparation and conversion to triammonium salt)

β-Cyclodextrin, 6A-[[13-carboxy-6,9,12-tris(carboxymethyl)-4-oxo-3,6,9,12-tetraazatridec-1-yl]amino]-6A-deoxy- (9CI) (CA INDEX NAME)

```
DOCUMENT NUMBER:
ORIGINAL REFERENCE NO.:
                           121:7705a,7708a
                           Lanthanide-Cyclodextrin Complexes as Probes
for Elucidating Optical Purity by NMR Spectroscopy
Wenzel, Thomas J.; Bogyo, Matthew S.; Lebeau, Estelle
TITLE:
AUTHOR(S):
CORPORATE SOURCE:
                           Department of Chemistry, Bates College, Lewiston, ME,
                           04240, USA
SOURCE:
                           Journal of the American Chemical Society (1994),
                           116(11), 4858-65
                           CODEN: JACSAT; ISSN: 0002-7863
DOCUMENT TYPE:
                           Journal
LANGUAGE:
                           English
AB A multidentate ligand was bonded to cyclodextrins by the
     reaction of diethylenetriaminepentaacetic dianhydride with 6-mono- and
     2-mono(ethylenediamine) derivs. of cyclodextrin. Adding Dy(III)
     to the cyclodextrin derivs. enhanced the enantiomeric resolution in
     the NMR spectra of carbinoxamine maleate, doxylamine succinate,
     pheniramine maleate, propranolol-HCl, and tryptophan. The enhancement was
     more pronounced with the secondary derivative The Dy(III)-induced shifts were
     used to elucidate the geometry of cyclodextrin-substrate
     inclusion complexes. Lanthanide-induced shifts are reported for complexes
     of aspartame, tryptophan, propranolol, and
     1-anilino-8-naphthalenesulfonate with cyclodextrins, and the
     relative magnitudes of the shifts agree with previously reported
     structures of the complexes.
```

PAGE 1-A HO2C-CH2-N-CH2-CH2-N-CH2-CH2-N-CH2-C-NH-CH2-HO2C-CH2 HO2C-CH2 HO2C-CH2

но-

но-

PAGE 1-B

155635-14-6P 155635-15-7P RL: PREP (Preparation) (preparation of)

RN CN

P-Cyclodextrin, 6A=[13-carboxy-6,9,12-tris(carboxymethyl)-4-oxo-3,6,9,12-tetraazatridec-1-yl]amino]-6A-deoxy-, triammonium salt (9CI) (CA INDEX NAME)

PAGE 1-A

но-

но-

PAGE 1-B

155635-15-7 CAPLUS γ-Cyclodextrin, 6A-[[13-carboxy-6,9,12-tris(carboxymethyl)-4-oxo-3,6,9,12-triagcarboxy-(9CI) (CA INDEX NAME) CN

PAGE 1-A

но-

PAGE 1-B

```
L8 ANSWER 60 OF 61 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER:
                        1993:574166 CAPLUS
                        119:174166
```

DOCUMENT NUMBER:

ORIGINAL REFERENCE NO.: 119:30919a,30922a

Preparation of anti-retroviral cyclodextrin polysulfate esters

Moriya, Tamon; Kurita, Hiroki; Otake, Toru; Mori, INVENTOR(S): Haruyo; Morimoto, Motoko

PATENT ASSIGNEE(S): Tanabe Seiyaku Co., Ltd., Japan Jpn. Kokai Tokkyo Koho, 14 pp.

CODEN: JKXXAF DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO. DATE APPLICATION NO. DATE JP 04309502 Α JP 1991-164079 19910408 PRIORITY APPLN. INFO.: JP 1991-164079 19910408 MARPAT 119:174166

The title esters contain ≥1 glycosyl unit having deoxyamino group on C-6 position which is derived from amino acids, and multiple sulfate ester groups or salts thereof, and are prepared Heating mono[6-(N- α -benzyloxycarbonyltriptophyl)amino-6-deoxy]- β cyclodextrin in pyridine (Py) while stirring with SO3-Py complex

gave the desired polysulfate ester.

150213-94-8P 150213-95-9P 150213-96-0P 150238-39-4P 150238-42-9P 150266-06-1P 150319-89-4P 150319-90-7P 150319-91-8P RL: PREP (Preparation)

(anti-retroviral, manufacture of) 150213-94-8 CAPLUS RN

β-Cyclodextrin, 6A-[[4-[[3-[[2-amino-2-oxo-1-(phenylmethyl)ethyl]amino]-1-[[[2-amino-2-oxo-1-

(phenylmethyl)ethyl]amino]carbonyl]-3-oxopropyl]amino]-1,4dioxobutyl]amino]-6A-deoxy- (9CI) (CA INDEX NAME)

10576346

PAGE 1-A

PAGE 1-B

PAGE 2-A

HO-

но-

PAGE 3-A

- 150213-95-9 CAPLUS \$P-Cyclodextrin, \$A-[[4-[[3-[(1-carboxy-2-phenylethy1) amino]-1-[[(1-carboxy-2-phenylethy1) amino]-1,4-dioxobuty1] amino]-6A-deoxy- (9CI) (CA INDEX NAME) CN

PAGE 1-A

- RN 150213-96-0 CAPLUS
 CN P-Cyclodextrin, 6A-deoxy-6A-[[4-[[3-[[2-methoxy-2-oxo-1-(phenylmethyl]amino]-1-[[[2-methoxy-2-oxo-1-(phenylmethyl]amino] carbonyl]-3-oxopropyl]amino]-1,4-disombutyl]amino] (901) (CA INDEX NAME)

10576346

PAGE 1-A

PAGE 1-B

PAGE 2-A

HO-

но-

PAGE 2-B

PAGE 3-A

R-C-OMe

- RN 150238-39-4 CAPLUS
- (A) β-(yolodextrin, 6A-[N-(N-(4-chlorobenzoyl)-L-phenylalanyl]qlyoyl]amino]-6A-deoxy-, hexadexis(hydrogen sulfate) (ester), hexadeoxptassium salt (901) (CA INDEX NAME)

CM 1

CRN 150238-38-3 CMF C60 H86 C1 N3 037

PAGE 1-A

PAGE 2-B

— он

CM 2

CRN 7664-93-9 CMF H2 04 S

но- s-- он

 $\label{eq:continuous} $$150238-42-9$ $$CAPLUS$ $$G-Cyclodextrin, $\delta_d-deoxy-6A-[[N-[(Phenylmethoxy)carbonyl]-L-phenylalanyl]glycyl]amino]-, hexadecakis(hydrogen sulfate) (ester), hexadecasodium salt [9CI] (OA INDEX NAME) $$$

CM 1

CRN 150238-41-8 CMF C61 H89 N3 038

HO CH2-OH OH OH CH2-OH CM 2 CRN 7664-93-9 CMF HZ 04 S RN 150265-85-3 CAPLUS CN P-Cyclodextrin, 6A,67-[[N-[N-(4-chlorobenzoyl]glycyl]-L-phopylalenyl]annon-6A,67-dideoxy-, pentadeoxkis(hydrogen sulfate) (enter), pentadeoxsedium salt (9CI) (CA INDEX NAME) CM 1 CRN 150265-84-2 CMF C78 HD2 C12 N6 039 CCI IDS

сн2-он

Ph-CH2-CH-C-NH-CH2-C-NH-CH2

но-сн2

-OH

PAGE 2-B

— он

— он

PAGE 3-A

5 (D1-OH)

CM 2

CRN 7664-93-9 CMF H2 04 S

RN 150266-06-1 CAPLUS
CN B-Cyclodextrin, 6A,6?-bis[[N-[N-(4-chlorobenzoyl)]-L-phenylalanyl]qlyoyl]amino]-6A,6?-dideoxy- (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 2-B

— он

5 (D1-OH)

- RN 150319-89-4 CAPLUS
 - β-Cyclodextrin, 6A-[[4-[[3-[[2-amino-2-oxo-1-
 - p=tyclocextrin, oa-[[a-[[3-[[2-mm.no-z-oxo-1-(phenylmethyl]ethyl]amino]-[-[[[2-mm.no-z-oxo-1-(phenylmethyl]ethyl]amino]-af-[[2-mm.no-z-oxo-1-(phenylmethyl]ethyl]amino]-af-deoxy-, nonadecakis(shydrogen sulfate) (ester), nonadecapotassium salt (9CI) (CA INDEX NAME)
 - - CM
 - CRN 150213-94-8 CMF C68 H100 N6 O40

10576346

PAGE 1-A

PAGE 1-B

PAGE 2-A

HO-

но-

PAGE 2-B

PAGE 3-A

R-C-NH2

CM 2

CRN 7664-93-9 CMF H2 O4 S

RN 150319-90-7 CAPLUS CN P-Cyclodextrin, 6A-[[4-[[3-[(1-carboxy-2-phenylethyl)amino]-1-[[(1-carboxy-2-phenylethyl)amino]-1,4dioxobutyl]amino]-6A-deoxy-, octadecakis(hydrogen sulfate) (ester), octadecapotassium salt (9CI) (CA INDEX NAME)

CM 1

CRN 150213-95-9 CMF C68 H98 N4 O42 10576346

PAGE 1-A

PAGE 1-B

PAGE 2-A

но---

но-

PAGE 2-B

CM

CRN 7664-93-9 CMF H2 04 S

HO-S-OF

RN 150319-91-8 CAPLUS

N B-Cyclodextrin, 6A-deoxy-6A-[[4-[[3-[(2-methoxy-2-oxo-1-(phenylmethyl)ethyl]amino]-1-[[[2-methoxy-2-oxo-1-(phenylmethyl]ethyl]amino]-1-[[[2-methoxy-2-oxo-1-(phenylmethyl]ethyl]amino]-, nonadecakis[hydrogen sulfate) (ester), nonadecaptassium salt [901) (OA INDEX NAME).

CM 1

- CRN 150213-96-0
- CMF C70 H102 N4 042

PAGE 1-A

PAGE 1-B

PAGE 2-A

но-

но-

PAGE 2-B

PAGE 3-A

CM 2

CRN 7664-93-9 CMF H2 04 S

L8 ANSWER 61 OF 61 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1990:459831 CAPLUS DOCUMENT NUMBER:

ORIGINAL REFERENCE NO.:

TITLE: An approach to vectorization of pharmacologically active molecules: the covalent binding of

Leu-enkephalin to a modified B-

cyclodextrin

AUTHOR(S): Parrot-Lopez, H.; Djedaini, F.; Perly, B.; Coleman, A.

W.; Galons, H.; Miocque, M. Lab. Chim. Org. 3, Univ. Paris V, Paris, F-75006, Fr. CORPORATE SOURCE:

SOURCE: Tetrahedron Letters (1990), 31(14), 1999-2002

CODEN: TELEAY: ISSN: 0040-4039

DOCUMENT TYPE: Journal

LANGUAGE: English

CASREACT 113:59831 OTHER SOURCE(S):

The neurotropic peptide Leu-enkephalin was coupled to a mono-6-amino

permethyl β - cyclodextrin at the C-terminal residue. The resulting compound was fully characterized by proton NMR in D2O and d6-DMSO evidencing complete reduction of the mol. symmetry of the cyclodextrin

128287-89-8P

RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation of)

128287-89-8 CAPLUS

L-Leucinamide, L-tyrosylglycylglycyl-L-phenylalanyl-N-(6A-deoxy-2A, 2B, 2C, 2D, 2E, 2F, 2G, 3A, 3B, 3C, 3D, 3E, 3F, 3G, 6B, 6C, 6D, 6E, 6F, 6G-eicosa-Omethyl-β-cyclodextrin-6A-yl)- (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 1-B



PAGE 2-A

MeO-

Me0-

PAGE 2-B

PAGE 3-A

=> D HIS

(FILE 'HOME' ENTERED AT 09:10:42 ON 01 MAY 2009)

FILE 'REGISTRY' ENTERED AT 09:10:52 ON 01 MAY 2009

11 SCREEN 1953 AND 1942

12 STRUCTURE UPLOADED

13 QUE L2 AND 11

14 12 S SSS SAM L3

15 280 SSS FULL 13

FILE 'CAPLUS' ENTERED AT 09:13:07 ON 01 MAY 2009

L6 85 S L5 L7 41018 S CYCLODEXTRIN L8 61 S L6 AND L7

=> LOG H
COST IN U.S. DOLLARS
SINCE FILE
EMTRY
SESSION
540.32
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)
SINCE FILE
TOTAL

CA SUBSCRIBER PRICE ENTRY SESSION -50.02 -50.02

SESSION WILL BE HELD FOR 120 MINUTES STN INTERNATIONAL SESSION SUSPENDED AT 09:21:06 ON 01 MAY 2009